E G Merick, Esq 66
Foot Woodward ave

THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. VIII. NO. 26. CLEVELAND, O., JULY 1, 1886. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

The revenue cutter Perry paid this port a visit this week.

Mr. H. J. Webb, who has almost entirely recovered his health, can now be found any day at his office in the Arcade block.

Captain David Vance was in the city this week looking after repairs to the schooner Vance.

Webb & Richardson's new steamer at Radcliffe's yard will probably be launched on the 10th of July.

The propeller Oconto, which cleared Tuesday for Ogdensburg, put back on account of a leak around the stern post.

Messrs. Palmer & Benham have purchased the schooner George Sherman for $3,250. Captain Gifford will sail her.

The James Pickands will prove herself to be a large carrier this trip. She took on a cargo of 1985 tons of ore at Escanaba this week.

Tugs C. E. Bolton and Florence went on Smith's boxes Monday, the former to have a leak stopped and the latter to have her shaft straightened.

Captain J. H. Andrews, who has been confined at his home at Painesville with pneumonia, rejoined his schooner, the Nellie Reddington, at Chicago.

One hundred enrollments and two hundred and six licenses of vessels were issued at the Cleveland custom office during the fiscal year ending June 30.

The schooner David Wallace, which arrived Monday, went into drydock as soon as her cargo was out to locate a leak which she started off Sandusky while on the way down.

The propeller Oconto, plying on the favorite route, on the St. Lawrence, cleared for her firt trip on Tuesday. Cleveland people who would enjoy a pleasant vacation should book for passage.

Freights are still firm at 55 cents to Milwaukee, and 60 cents to Chicago, one charter being made Tuesday to the latter port at 65 cents. Ore freights are firm and tonnage in active demand at $1.20 from Marquette, $1.30 from Ashland and $1.00 from Escanaba to Ohio ports.

The Lizzie Wellington, a schooner rigged yacht from the seacoast, arrived at this port Monday. She is owned by J. B. Porter, of Cincinnati, who is a member of the shooting club, with headquarters at Port Clinton, where the yacht will do service. In the meantime she will take on new rigging and receive some necessary repairs.

Lieutenant Schumacker was in the city this week sizing up charges preferred against Captain C. C. Goodwin. His object was to learn whether or not Captain Goodwin is or is not a law abiding citizen. Many times the gentry around the piers have been after the captain's scalp, but heretofore have failed to obtain the reeking trophy.

Captain Wilson's new steamer the Charlemagne Tower, Jr., went up the old river bed yesterday for a deck load of railroad iron, consigned to Duluth. She measures 1825.45 gross and 1543.82 net tons. She will sail to-day. The Spokane, which left Duluth on Tuesday with 61,000 bushels of wheat and 400 tons of copper, nets 1465 tons. The carrying capacity of the two steamers will be compared.

Captain Slyfield and C. C. Burnett, owners of the steambarge Cleveland, have been informed that one-half of the fine of $500, recently imposed would be remitted, the liability being placed at $250. It will be remembered that Captain Slyfield put in at Bay City for renewal of his certificate, but the inspectors being absent he assumed the responsibility of passing on to Cleveland. On the way down the water bottom of the boiler gave out, scalding to death one man and injuring two others.

Captain Leith, of the schooner Lizzie A. Law, is profuse in his praise of the life saving crew, stationed at Erie. Last Tuesday night he left Erie basin in tow of a tug, and after passing the point of the peninsula he stranded on the east side of the channel, where he was exposed to a heavy westerly wind. For a time the vessel was in imminent danger of breaking a hole in her bottom. The life saving crew promptly boarded her, and by working hard all night, succeeded in getting her off without damage.

At Globe drydock, since our last report, the tug Samson took on a new wheel. The schooner Vance received some new keel forward, forefoot, a piece of stem, about 125 feet of garboard, considerable new plank on her bottom, part new bulwarks, refastened, calked outside from keel to plank sheer, buts, combing, plank sheer and box calked, painted outside and in, and a new gaff topsail. Presley & Company have put the Vance in A1 shape, and the owners are well pleased with the job. The David Wallace was in drydock yesterday, and it was found that the leak was caused by the loss of oakum between buts. The schooner M. E. Tremble went in drydock last night for survey and repair of damages, caused by her experience near Two Harbors last week.

The steam yacht Peerless, 113.81 tons, built by Messrs. Cramp, and purchased by Mr. Harkness, during a recent visit east, arrived at this port Sunday evening. The Peerless is a handsome craft, well finished, commodious, comfortable, and speedy. She has an iron hull, 146 feet keel, 166 feet over all, 22 feet beam, and 13 feet depth. Her engine is triple compound, the cylinders being 17, 24 and 40 by 22-inch stroke, rated at 1000 H. P. Her boilers are 12 feet in diameter, and 12½ feet long, and allowed 168 pounds to the square inch. She has corrugated furnaces and steam steering gear. Under her builders number, 246, she won two prizes, in regattas last, year which were presented by the New York Yacht Club. She made the run from Port Colborne to Cleveland in 9 hours and 31 minutes with a broken wheel, and it is thought the spray will fly when she meets the crack boats of the lakes, the Mary and Permelia. Captain James Haverty is in command, Mr. Haverly pilot; James Hand chief engineer, and W. W. Tyler assistant. She will carry a crew of thirteen all told. She will go to Detroit and be present at the regatta on Lake St. Clair next week.

BUFFALO.

The steamer Raleigh went into Union drydock to have her bottom examined. She was crowded ashore by a raft.

Smith, Davis & Company were advised that the schooner O. M. Bond, bound up with coal, had struck one of the piers at Port Dalhousie, the mouth of the Welland canal, and sunk in twenty feet of water. Her bows were said to be badly stove in. The Bond is insured in the pool for $7,000. Captain George McLeod, representing the underwriters, lett for the wreck.

Telegrams from the 14 mile level, between Spraker's basin and Schoharie creek, state that there is a break in the canal somewhere on the level, and the water is down. The boat Topsy, owned by Frank O'Rourke, of Buffalo, and loaded here with wheat, is lying across the aqueduct, but as she projects over it only ten feet she is thought not to be in any danger. The break is at Lasher's aqueduct, west of Vatesville.

BAY CITY.

Special to the Marine Record.

The propeller W. H. Stevens, building at F. W. Wheeler's shipyard, West Bay City, for the Ward line, will be ready for business about the 1st of August.

The barge Matilda has had a thorough rebuild, and is now rated at B2½.

The barge Saginaw that has been in ordinary at Saginaw for some time, was brought down Sunday by the tug Dickson, and will load lumber for Cleveland.

The steambarge Mackinaw was in port Thursday with a load of cedar blocks, consigned to Saginaw parties.

The revenue cutter Fessenden was in the river on a flying visit, as usual. A number of her crew were ashore and astonished the natives, as it were.

The season at Point Lookout (Sand Point), opened on Wednesday last, and about twenty-five families have already taken up their abode there. The steamers Arundel and Metropolis will make this one of their landings in the future.

The steambarge Maine was in the river on Sunday, and will load lumber for Buffalo.

Captain James Hathaway has just returned from Grand Marais with the tug A. W. Wright, owned by Burt & Gamble, of Saginaw. The boiler of the Wright has been condemned, and it is understood a new one is to be built and put in her at Saginaw.

The tug Temple Emery, with the big log boat in tow, left the river Friday, bound for Georgian Bay.

It is reported that the McGraw rafts, now being towed from Lake Superior to this port, have been sold at a good round price to Messrs. Hall & Buell, of South Manistique, Mr. Will McGraw having offered the logs to Mr. L. A. Hall at Marquette just before they started, which offer was accepted and Bay City is so much out.

The propeller Cleveland, Captain Slyfield, and tow, have arrived in the river, and all load for Ohio ports. SHAW.

CHICAGO.

Special to the Marine Record.

A large amount of line boat tonnage in port this week caused grain freights to weaken, 2¾c on corn to Buffalo being taken in large quantities on Tuesday, and freights remained at 4½c on corn to Kingston, and 2c to Georgian Bay ports.

The Phœnix Yacht Club regatta has been postponed till July 10th.

The scow Gray Oak, Captain Nels Larsen, from Ashland, with 400,000 feet of lumber, arrived here Saturday morning last, in tow of the steambarge J. H. Shrigley. This is the first appearance of the Oak at this port. She was built at Bayfield, Wis., in 1885, registers 277 tons, length over all 132 feet, beam 31 feet, depth of hold 9 feet.

The schooner H. Taber, Captain E. Stevenson, arrived Friday night with lumber from Duncan City, in tow of the steambarge Robert Holland. The Taber's jibboom, some head gear, a cathead, anchor stock, some rail, stanchions, covering board and plank on the starboard bow were carried away or badly damaged. The Holland went ashore about 3 o'clock Thursday morning in a fog on North Manitou island, and the Taber in tow, ran up on to her, causing the damage above mentioned, and some slight damage to the Holland. A portion of the steambarge's deck load was taken on board the schooner, some of it was jettisoned, and with the assistance of both crews, the Holland was got off about 3 o'clock on the afternoon of the same day.

L. Moffat, of Detroit, arrived in the city to-day to consult with vessel owners about organizing a mutual marine insurance company.

The steamship J. H. Devereux arrived here Wednesday morning with 2,300 tons of hard coal from Buffalo, consigned to O. S. Richardson & Company. Captain Tom Wilford and the Miller Brothers, engineers, are all looking and feeling A1.

The sloop yacht Peri, Captain McDonald, was launched from Charley Larsen's boat yard Wednesday. She has had considerable of a rebuild and will be fitted out at once to take part in the Phœnix Yacht Club regatta on the 10th of July.

C. Larsen has commenced building another steam launch for C. P. Willard & Co., 35 feet over all, 8 feet beam, 3 feet depth of hold. She will be propelled with twin screws.

The fine new steamship Pickands and her consort, the Wayne, laden with iron ore, arrived on Saturday. This is the Pickand's first appearance at this port. She was much admired by marine men, who consider her one of the finest and best barges afloat. She was recently built by Quayle's Sons at Cleveland, and rates A1* WILLIAMS.

EAST SAGINAW.

Special to the Marine Record.

A sailor from the revenue cutter Fessenden, which was at Bay City Wednesday, promenaded the streets here in the uniform of the navy, and attracted the attention of many.

The tug Little Giant received a new set of flues at Wildman's boiler shop during the week.

The steamers Burt and Lucile both gave excursions to the bay on Sunday, and had immense crowds. The usual racing was indulged in, and the boats seem to be gaining in patronage by the operation, which is just what the owners need, as it is said that since the Lucile came on the river route the big boats hardly pay expenses during the week, and the Sunday excursions keep the ball rolling.

The tug A. W. Wright has been taken to Mason's shipyard, where a new boiler will be placed in her.

Messrs. Buck & Hubble's dredge No. 1 has been taken to Saginaw City, where some work is to be done for the city.

The steamers Charles P. Fish and Daisy Lee are again the only boats strictly on the Saginaw City route, the yacht Bessie M. having pulled off, after having tried her luck one day.

The old brick house on Tawas Point, formerly the light keeper's dwelling, was burned to the ground on the 23d. It is claimed that the building was erected many years ago, by order of Jeff Davis.

The steam sand scow Ida Burton, of Detroit, is now engaged in taking sand from Carrolton bar to Bay City.

The tug Thomas Maytham is having repairs made to her boiler at Bartlett & Company's slings.

Robert Boyd, a prominent citizen, and at one time vessel owner, of this city, was drowned on Thursday last at Tawas. Mr. Boyd had rented a small boat and rowed up into the bight of the bay for the purpose of taking a bath, and as near as can be learned he was taken with cramps, and was drowned in ten inches of water, having fallen on his face.

The ferry Daisy Lee is having repairs made to her boiler at Metts & Merrill's shop.

The owners of the steamer Lucile have concluded not to bring the Queen of the Lakes to he river, she not being large enough for the business. SHAW.

SARNIA.

In the superior court at Detroit, on Thursday, H. McMorran was awarded a judgment of $8,268.29 against S. A. Murphy for wrecking machinery.

An interesting decision: Judge Brown on Thursday rendered a decision in the case of S. D. Miller vs. the tug Hercules that a vessel lying at the dock so that a portion of her length overlapped another dock would have to pay warfage for the dock overlapped. The decision was in accordance with the explicit directions of the state statute.

Work commenced on the raising of the machinery of the Algoma on the 15th.

The schooner Hercules is getting a thorough overhauling. Her hull and decks are being calked, and she will receive a fresh coat of paint. She will be ready for trade in a few days and Captain Joe Glass will be responsible for her actions.

ST. CLAIR FLATS.

Special to the Marine Record.

The spacious rooms of the Star Island House are filled with people who enjoy the sports and scenery and good fishing.

The schooner Dan Provorst, in heaving up anchor met with considerable trouble, and on investigation it was found that instead of one anchor there were two.

There is now no trouble at the Southeast Bend. The ranges are all right, and pilots acknowledge the same.

McNiff & Son are repairing the broken raft at the Flats. BOB.

MARITIME LAW.

COLLISION—TUG AND DRAWBRIDGE—VESSEL APPROACHING AT AN ANGLE—DUTY OF ENGINEER OF DRAW—LIABILITY OF CITY CORPORATION—NEGLIGENCE OF SERVANT.

U. S. District Court, Southern District of New York.

1. A tug with a float attempted to pass through a drawbridge on the Harlem River, but did not approach the draw in a line with the opening, whereby the pilot house of the tug struck the end of the draw and was damaged. The engineer of the draw perceived how the tow was approaching, but made no effort to favor the passage of the tow by revolving the draw beyond the middle line as was the practice to do when necessary. Held, that the tug was in fault for her manner of approaching the opening, and for not assisting the tow in her passage, the engineer of the draw was guilty of contributory negligence.

2. The duty to take the proper care of a bridge includes the duty to make proper provision for the passage of vessels through the draw. The custodians of the bridge are bound to the use of ordinary dilligence to avoid accidents to vessels going through the draw in a customary manner, as one of the incidents of the management of the bridge. They are therefore responsible for the want of ordinary care on the part of their sevants, and the city corporation is liable for negligence in the employees of the department of parks.

Brown, J.

At about 8:30 a. m. on the 24th of February, 1884, as the steam tug James A. Langton, having, float No. 4 lashed on her starboard side, was going up the Harlem River with the flood tide; in attempting to pass through the eastern passage of the open draw of the 3rd Avenue Bridge, the pilot-house of the tug struck the corner of the draw causing various items of damage for which this libel was filed.

The tug was about 70 feet long by 19 feet beam; the float 190 feet long by 34 feet beam. The bridge is 55 feet wide. The whole span of the draw, which revolves on its center so as to open two passages for vessels, is about 212 feet long; so that when it is fully open, each passageway for vessels is 78 1-2 feet in the clear. The abutment on the New York side is 134 feet long; that on the Westchester side, 212 feet, making the whole length of the bridge 490 feet. The whole width of the tug and tow was about 53 feet.

The libelant contends that the draw was not open by some 10 or 15 feet, and that was the cause of the collision; that he came up the river in line with the east passage and heading directly through it; and that the float went within three or four feet of the Westchester side. The respondents' witnesses allege that the draw was open exactly true; that the tug and float came up the New York, or westerly side of the river, and appeared to be designing to go through the west passage of the draw; but that when near the bridge they sheered to the eastward attempting the east passage, and thus threw the boats quartering upon the corner of the draw, rendering the collision inevitable.

I am satisfied that the truth lies between these two accounts. It would have been impossible for the tug if heading for the western passage within 250 or 300 feet, as the respondents' witnesses allege, to have turned so cumbersome a float 134 feet to the eastward so as to enter the eastern passage at all. The tide was running flood at the rate of some three miles an hour; and the boat, though under a slow bell, must have had some considerable headway or she could not have been steered at all, nor have crossed from one passage to the other. A disinterested witness standing on the dock about 700 feet below the bridge testified that the tug and float seemed to be about in mid-river, heading for the east passage. The east passage, however, was from two-thirds to three-fourths of the distance across the river; so that if this witness's statement is to be accepted, the tug and float were not heading directly up river; but, must have been heading to the eastward so as to reach and pass through the eastern passage. To this extent the evidence of the respondents is therefore partially corroborated; although the distance is much greater than they state. The east passage was some 25 or 26 feet wider than the tug and float. Had they been heading from below in a straight line for the east passage, and gone, as the captain says, within three or four feet of the east abutment, they would have cleared the other side by over 20 feet; and the corner of the draw must have been nearly 25 feet less than fully open in order to have struck the pilot house, a distance nearly double the distance estimated by the libelant's witnesses.

From these considerations I am satisfied that the tug and float did not approach the draw in line with the opening, as they might and should have done; but that they approached it somewhat upon an angle, and must be held in fault for doing so when nothing constrained them. The tide there flows about true; and they could not have been deflected by currents.

On the part of those in charge of the bridge, it is clear from the evidence that they had abundant notice of the approach of the tug, and abundant time to give them all available space. The engineer thinks it was one or two minutes before the collision that he had the draw open. He saw that she was coming upon an angle, but made no effort to favor her passage by revolving the draw beyond the middle line as he testifies it was the practice to do when necessary. The open draw extended some 79 feet down the river. There were no guards beneath of any kind to protect vessels approaching it, such as exist in many cases Reasonable consideration for the safety of vessels going through such a passage, where the tide is strong, would seem to demand that such guards should be constructed corresponding with the open projection. But without determining that point here, it seems clear that where no such guards exist and where the tide is strong, and the vessel is seen approaching upon an angle and likely to hit the edge of the draw if it be not moved, ordinary care demands that the draw be moved farther in order to avoid accidents, The evidence shows that there was abundant time to do this, and that it might have been done with the utmost ease. Failure to perform this simple and customary duty must be held contributory negligence on the part of the engineer. The mode of collision shows that had the draw been moved a few feet farther the collision would not have taken place. Both parties upon the facts must be held to have contributed to the collision; and the libelant is, therefore, entitled to one-half of his damages and costs, provided the corporation respondent is answerable for the neglect of the engineer to open the draw farther.

2. I deem it unnecessary to consider here the somewhat nice destinctions which have been made in the several cases decided in the court of appeals in this state as regards the liability of a city corporation for the negligent acts of the servants employed under its different heads of departments, as constituted by law. As respects negligence by the employees of the department of public charities and correction of the fire department, and of the board of education, it has been adjudged that the corporation is not liable. (Maxmilian vs. The Mayor 63 N. Y. 166; Smith vs. City of Rochester, 76 N. Y. 506; Ham vs. the Mayor, 70 do. 459.) The first of these cases was followed by this court in the case of Haight vs. the Mayor, (24 Fed. Rep. 93) In the same case however, Folger, J. says, page 170, "the duty of keeping in repair streets, bridges and other common ways of passage, and sewers, and a liability for a neglect to perform that duty, rests upon an express or implied acceptance of the power, and an agreement so to do. It is the duty with which the city is charged for its own corporate benefit, to be performed by its own agents, as its own corporate act." The Harlem bridge was declared by statute to be a public highway, the care and custody of which devolved by the Act of 1857, Ch. 774, upon the counties of New York and Westchester. By the laws of 1871, ch. 574, the custody and control of the bridge passed into the department of parks, one of the departments of the respondents, and when in 1873 the southeast portion of Westchester county, including the territory about the bridge, was annexed to the city of New York, the exclusive control passed to the department of parks in precisely the same manner as that department had the care and control of the streets in the upper parts of the city and in the annexed territory. In the recent case of Ehrgott vs. the Mayor, (96 N. Y. 264,) the corporation was held answerable for an injury to the plaintiff through the negligence in the care of the streets in the annexed district in charge of the department of parks. The Coury says, p. 272, "It is the duty of the city to keep its streets in repair, and that duty as to all the streets in the annexed territory is devolved upon the park commissioners. It is a duty which they discharge, not for themselves, not for the public generally, but for the city. The duty is not taken away from the city. It is still bound to discharge the duty, and the park commissioners are the agency through which it discharges it." There can be no distinction in the obligations of the city as respects their care of the streets, and the care of the bridges, which by statute are declared a public highway. The court of appeal, moreover, in the case last cited, cite with approval the case of Richard vs. The Mayor, (16 Jones & Sp. 315,) where the city was held answerable for an injury through a defect in a bridge which was like the present under the control of the department of parks. These cases seem to me to be equivalent to an express adjudication by the state courts that the corporation is liable for any negligence in the management of streets or bridges under the department of parks; and as an adjudication upon the relation of these officers under the state laws it must be adopted and followed by this court.

The duty to take proper care of a bridge includes the duty to make proper provision for the passage of vessels through the draw. The waters of the Harlem river are public navigable waters of the United States. In constructing the bridge with a draw, and in undertaking to manage the draw as to allow vessels to pass, the State and the city have recognized the right of vessels to pass through, without any appeal to the national authority to protect that right.) People vs. Saratoga etc. R. R. Company 15 Wood, 113, 134, 136; Escanaba Co. vs. Chicago 107 U. S. 678, 683; Miller vs. The Mayor 109 U. S. 385, 393. Having thus recognized the rights of commerce, and undertaking to provide accommodations for the passage of vessels, the custodians of the bridge are bound to the use of ordinary diligence to avoid accidents to vessels going through the draw at customary hours and in the customary manner, as one of the incidents of the care, management and control of the bridge itself. They are responsible, therefore for the want of ordinary care and dilligence in their servants, and the consequent damage.

Both being found in fault the libelant is entitled to one-half his damages and costs; and an order of reference may be taken to compute the amount if not agreed upon.

April 5, 1886.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, June 22, 1886

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended June 19, 1886:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage. Gross.	Net.	Home Port.
			SAIL VESSELS.			
106 420	.....	Sc	Annie L. Green,	.....	61 55	Brooksville, Me.
106,421	.....	Sc.	Anna R.,	41.27	35.87	Bayfield, Wis.
3,347	.....	Sc.	Bonita,	14 44	13.72	San Francisco, Cal.
120.641	.....	Sl.	Fevue Arland,	7.51	7.13	Galveston, Tex.
85,925	.....	Sl.	Garnet,	6.10	5 80	New York, N. Y.
95,880	.....	Cat	Hattie F. Burcham,	6 60	6.27	Patchogue, N. Y.
76,630	.....	Sl.	J. I. Housman,	7.04	6.69	Sayville, N. Y.
14.446	.....	Sc.	Kate L. Pray,	59.41	56.44	Eden, Me.
91,845	.....	Sc.	Maud E.,	9 31	8 85	Pascagoula, Miss.
155,127	.....	Sl.	Osseo,	15.13	14.37	Key West, Fla.
81,114	.....	Sc.	W. C. Norcross,	72 26	68.65	Rockport, Me.
81 115	.....	Sc.	Wahnipitae,	1431.54	1359 97	Buffalo, N. Y.
81 116	.....	Sc. y.	Widgeon,	9 95	9 46	New York, N. Y.
			STEAM VESSELS.			
3 348	.....	St. s.	Aalboa,	79.75	46.85	New York, N. Y.
3 346	.....	St. s.	Bigstone City,	22.65	16.65	St. Paul, Minn.
3 350	.....	St s	Boomerang,	11 07	9 07	Paducah, Ky.
126 354	.....	St. p	City of Chartiers,	113 63	85.12	Pittsburg, Pa.
120 642	.....	St. p.	T. D. Underwood,	126 97	126 07	St. Paul, Minn.
85 924	.....	St. s.	Grace Pitt,	.....	87.89	Albany, N. Y.
85 926	.....	St s	Guide,	47.68	28.77	Ogdensburg, N. Y.
85 927	.....	St. p.	Gleaner,	34.28	17 44	Seattle Wash.
95,879	.....	St. y	Hanniel,	58 18	29 09	Boston, Mass.
140,827	.....	St. s.	Leo,	34.98	17.49	Chicago, Ill.
91,846	.....	St p.	M. B. Shaw,	34.59	30.59	Forest City, Me.
145 421	.....	St s	Temple Emery,	155 06	77 53	Buffalo, N. Y.
			UNRIGG'D VESSELS.			
29 966	.....	Bge.	Annie,	35.00	35 00	Galena, Ill.

JARVIS PATTEN, Commissioner of Navigation.

THROUGH THE RAPIDS.

Since the days of Captain Webb there have been many who have declared their intention of going through the whirlpool rapids and the whirlpool of Niagara river, but none has attempted the feat. The latest seeker after fame in this line is C. D. Graham, a cooper, living on South 20th street, Philadelphia, who has been in the city for the past two months in anticipation of taking the perilous trip on July 5th. He is a well appearing young man, 32 years of age, and weighing one hundred and forty pounds.

"The whirlpool is not as dangerous as has been imagined," said he, "and I will show that it and the rapids can be passed in safety. I have been at the Falls every Sunday since I have been here, and have studied the action of the water thoroughly. Six weeks ago I took a barrel thirty inches long and similar in shape to the one which I will use, and, weighting it with fifty pounds of sand, dropped it off the old Suspension bridge. I had men watching it all along the banks, and its progress was carefully noted. Eight minutes sufficed for its passage through the rapids and whirlpool, and in that time it did not go under water once. The barrel was taken from the water and not a mark could be seen on it.

"I am confident that I will be successful, and am not afraid to go through. I expect to be rowed down the river near where Webb went into the water, and then have the barrel dropped over the side into the river. If I am not allowed to go through the rapids in public, I will go through them in private, and convince the people that it can be done. If they give me a chance, and I am successful in going through the whirlpool, I will let them drop me from the old bridge into the water, a distance of one hundred and ninety feet, and then float through the rapids."

A visit was paid to the cooper shop of Matt Land on Seneca street, where Graham has been doing his work. There he showed the barrel which he expects will safely carry him through the seething waters of Niagara. The barrel is built somewhat in the shape of an egg, the top being 26 inches, the bottom 17 inches, and the swell 33 inches in diameter. It is made of staves 1¼ inches thick, the bottom being 2½ inches thick, and the top, in which a manhole will be placed, 1½ inches thick. The barrel, which is 7 feet long, is protected on the bottom by twenty-three 1¾-inch hoop iron bands, and the upper part by four 2-inch bands.

"This cask," said he, "will float bottom down and will be weighted to have a draught of four feet. I will enter it through a man hole on the top, and will be fastened on the inside by a six-inch canvas belt, which will strap me to a bag-shaped hammock, which will keep me from striking the sides of the barrel. Two valves will be put on top with which I can get air when necessary, and also several holes which will be plugged and which I can open at pleasure. The barrel will be painted to-night, and will be on exhibition until Friday next at the store of Joseph Toms, No. 149 Selkirk street."—*Buffalo Express.*

FULTON'S FIRST STEAMBOAT.

The following letter, descriptive of the first voyage of the Clermont from Albany, was written by Robert Fulton and sent to Chancellor Robert R. Livingston, grandfather of Clermont Livingston, in whose keeping the letter now is:

NEW YORK, Saturday, the 28th of August, 1807.—Dear Sir: On Saturday I wrote you that I arrived here on Friday at 4 o'clock, which made my voyage from Albany exactly thirty hours. We had a little wind on Friday morning, but no waves which produced any effect. I have been making every exertion to get off on Monday morning, but there has been much work to do—boarding all the sides, decking over the boiler and works, finishing each cabin with twelve berths to make them comfortable, and strengthening many parts of the iron work. So much to do, and the rain, which delays the calkers, will, I fear, not let me off till Wednesday morning. Then, however, the boat will be as complete as she can be made—all strong and in good order and the men well organized, and I have nothing to do but to run her for six weeks or two months. The first week, that is if she starts on Wednesday, she will make one trip to Albany and back. Every succeeding week she will run three trips—that is, two to Albany and one to New York, or two to New York and one to Albany, always having Sunday and four nights for rest to the crew. By carrying for the usual price there can be no doubt but the steamboat will have the preference because of the certainty and agreeable movements. I have seen the captain of the fine sloop from Hudson. He says the average of his passages have been forty-eight hours. For the steamboat it would have been thirty certain. The persons who came down with me were so much pleased that they said were she to run periodically they never would go in anything else. I will have her registered and everything done which I can recollect. Everything looks well, and I have no doubt will be very productive.

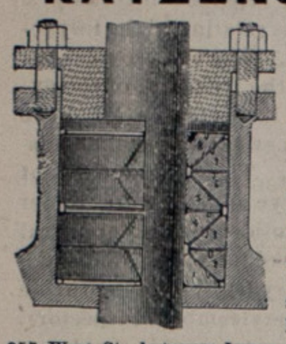
Yours truly, ROBERT FULTON.

You may look for me Thursday morning about 7 o'clock. I think it would be well to write to your brother Edward to get information on the velocity of the Mississippi, the size and form of the boats used, the number of hands and quantity of tons in each boat, the number of miles they make against the current in twelve hours, and the quantity of tons which go up the river in a year. On this point beg of him to be accurate.—*Hudson Republican.*

FOURTH OF JULY ON THE BEE LINE.

Desiring to promote friendly feelings and aid in the celebration of the 110th anniversary of the day of our national independence, the Bee Line will accept for return passage, on July 3d, 4th, 5th or 6th, 1886, all full-fare one-way local tickets purchased and dated July 3d, 4th or 5th. Half-fare tickets for children between the ages of 5 and 12 years will be accepted in like manner. Returning, passengers must take trains that stop regularly as per schedule, at the stations where tickets were sold. This arrangement will apply between local stations on the C. C. C & I. Ry., between local stations on the I. & St. L. Ry., and between local stations on the D. & U. R. R.

KATZENSTEIN'S



SELF-ACTING METAL PACKING

FOR PISTON RODS, VALVE STEMS, Etc.

Adopted and in use by the principal Iron Works and Steamship Companies within the last eight years in this and Foreign countries. Also flexible tubular metallic packing for slip-joints on steam pipes and for hydraulic pressure. For full particulars and references address

L KATZENSTEIN & CO

357 West St., between Leroy and Clarkson-st, N. Y.

CAPT. THOS. WILSON, who uses this packing on his Steamers, and THE MARINE RECORD are Agents for Cleveland and the Lakes.

M. T. COUGHLIN,

MANUFACTURER OF AND DEALER IN

Oils & Engineers' Supplies

AND

COUGHLIN'S CHALLENGE COMPOUND,

TO REMOVE AND PREVENT INCRUSTATION IN STEAM BOILERS, WHICH IT IS GUARANTEED TO DO.

49 North Market-st., Chicago.

SCOTT'S NEW COAST PILOT

IS SOLD BY

SHIP CHANDLERS

AND BY THE PUBLISHER,

GEORGE SCOTT,

AT 162 LARNED ST., E., DETROIT, MICH.

WM. H. RADCLIFFE,

Shipbuilder and General Repairing.

OLD RIVER BED, Ft. OF TAYLOR St.,

CLEVELAND, O.

PRESLEY & CO.,

Globe Drydock

Shipbuilding, Drydocking, Repairing and Spar Making.

CLEVELAND, OHIO.

SPIEGLE BROS.

MARINE SUPPLY STORE

WHOLESALE AND RETAIL

Grocers. Bakers and Ship Supplies;

Fresh & Salt Meat of all Kind.

30 & 32 River-st., opposite Detroit Steamboat Landing, and 184 Broadway. Telephone 112,

CLEVELAND, OHIO.

DAVID BARNHISEL, Agent.

DOMESTIC & STEAM COAL

Cleveland. Ohio

R. W. ABRAM,

Wholesale and Retail Dealer in

FRESH AND SALT MEATS.

NO. 544 DETROIT ST., CLEVELAND, O.

Vessel Orders Promptly Filled.

FOR SALE,

New Iron Tug.

Dimensions 78 feet long, 17 feet beam, 11 feet deep; draft, 9 1-2 feet; engine, 20x20, new steel boiler 7 feet in diameter, 13 feet long, allowed 112 pounds steam. Three iron breast hooks forward, collision bulkhead forward, water tight bulkhead forward of boiler; iron coal bunkers, water tight bulkhead aft at shaft-gland, with water tight iron deck forming the floor of after cabin. Iron decks, bulwarks and deck houses; iron tow posts aft. Heavy angle iron frames, with reverse bars on alternate frames; ¾ plate, steel floor plates; boiler, engine and bearing foundation of iron. For sale cheap

GLOBE SHIPBUILDING CO.

Vesselmen

SHOULD HAVE

OUR MARINE LAW BOOK,

Containing all points of MARINE LAW as determined by the United States Courts

—ON—

Seamen,	Owners,
Freights,	Charters,
Towage,	Registry,
Collisions,	Enrollments,
General Average,	Common Carriers,
Duties of Seamen,	Masters & Owners,
Bill of Lading, Wages, &c.	

The volumn is handsomely bound in stiff Board covers, and fine English cloth binding. Sent to any address postage paid for $1.00

L. S. SULLIVAN,

Vessel Agent and Commercial Broker--Spec Attention Given to Coarse Freight.

VESSELS FOUND FOR CARGOES AND CARGOES FOR VESSELS.

Office, 74 Water-st., Toledo, O.

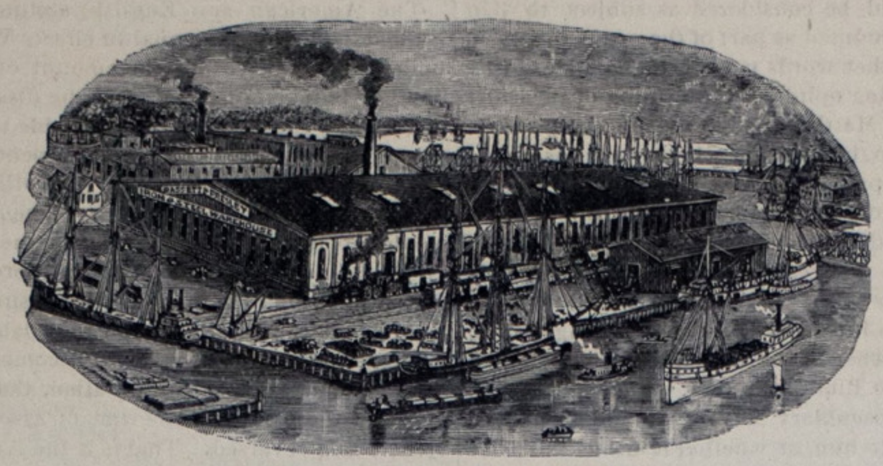
Telephone, No. 129.

IRA B. BASSETT. GEORGE PRESLEY, Jr.

BASSETT & PRESLEY,

(Successors to W. H. McCurdy & Co.)

Office and Warehouse, cor. Elm & Hemlock Streets, Cleveland, O.



WHOLESALE DEALERS IN

BAR, BOILER, HOOP, ANGLE AND SHEET IRON.

Nails, Railroad and Boat Spikes, Boiler, Tank and Cooper Rivets, Swedes Iron, Boiler Tubes, Nail Rods, Etc., Etc., Etc.

We Represent in this Market the Following Well-known Manufacturers:

Andrews Bros. & Co. .....Youngstown, O. BAR IRON AND POLISHED SHAFTING.	Dilworth, Porter & Co., Limited..Pittsburg, Pa. RAILROAD AND BOAT SPIKE.
Reading Iron Works.....Philadelphia, Pa. BOILER TUBES.	Hoopes & Townsend,.....Philadelphia, Pa. BOILER AND TANK RIVETS.
Central Iron Works.....Harrisburg, Pa. BOILER PLATES.	Sanderson Bros. Steel Co,.....Syracuse, N. Y. CAST STEEL.
Lindsay & McCutcheon,.....Pittsburg, Pa, HOOP, BAND & STAR HORSESHOE IRON.	Joseph Corns & Sons ....Massillon, O. CROWN STAY BOLT IRON.
George W. Johnson,.....Newcastle, Pa. TANK SHEET IRON.	Pencoyd Iron Works,.....Philadelphia, Pa. ANGLE IRON.

A Complete Stock of all above Goods in Our Warehouse.

TELEPHONE 1447. ESTABLISHED IN 1854

JAMES MAGNER & CO.,

PROVISION DEALERS,

The Vessel Trade a Specialty.

227, 229 & 231 Dearborn & 30 & 32 Quincy-st

OPPOSITE CUSTOM HOUSE,

CHICAGO, ILL

JAMES MAGNER. R. Z. WINSLOW.

Born's Steel Plate Ranges

For Steamboats, Hotels and Restaurants,

USED BY WOODS, PERRY & CO. ON FOREST CITY & KALKASKA AND BY WILSON TRANSIT LINE ON SPOKANE AND CHARLEMAGNE TOWER.

Messrs. F. & H. BORN. Cleveland, O., Jan. 26, 1886.

Gentlemen,—In reply to your inquiry of 25th inst., relative to the satisfaction your "Steel Plate Range" has given, I would say that we have had one in use about eight months, and find it perfect in all respects. My wife is well pleased with it. Have had no trouble to keep fire all night with hard coal. Very truly yours,

DAN. H. KEYS, of Lloyd & Keys.

Messrs. F. & H. BORN. Cleveland, O., Jan. 26, 1886.

Gentlemen—We are much pleased with the Steel Plate Range that you put into our propeller Kalkaska. It seems to be the right thing for steamboat service.

WOODS, PERRY & CO.

Messrs. F. & H. BORN. Cleveland, O., Feb. 3, 1886.

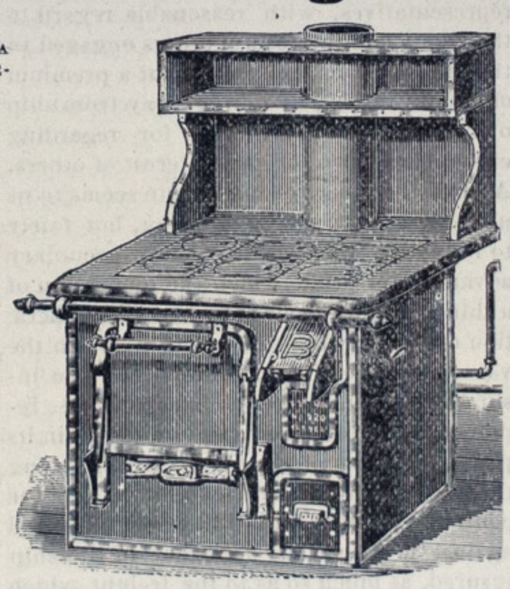
Gentlemen.—We have had in this institution for some time one of your largest size Steel Plate Ranges, and it has given good satisfaction It is strong, and we think will be durable. Respectfully, HON. S HARMOUNT,

Superintendent Tuscarawas Children's Home.

Messrs. F. & H. BORN, Cleveland, O., Feb. 1, 1886.

Gentlemen.—In reply to your favor I would state that we have had in use two of your No. 9-18 Double Oven Steel Plate Ranges in our restaurant for the last six months, and find that they do all you claim for them. We can cheerfully recommend them to anyone in need of a first-class, durable and economical Range.

Yours respectfully, RICHARDS & MCKEAN.



O. & P. COAL CO. & THOS. AXWORTHY.

FUEL DEPARTMENT.

PRESLEY, ARTHUR & CO., AG'TS.

Steamboats, Tugs, etc, Coaled Day and Night.

DEALERS IN LACKAWANNA ANTHRACITE COAL.

Docks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier

OFFICE 130 RIVER-ST., CLEVELAND, OHIO.

THE BEST BOAT PAINT MADE.

THE B. & P. PAINT!

Fire Proof, Water Proof, Acid Proof!

FOR IRON WOOD AND CANVASS.

Guaranteed not to Crack, Peel or Blister.

COLOR ONLY IN BLACK.

SEND FOR CIRCULAR AND TESTIMONIALS:

PARAFFINE PAINT CO., 244 South Water street, Chicago, Ill.

Our Paint is in use by Pacific Ocean Boats and by most all the Upper Mississippi River Boat Line

Grummond's Mackinac Line

Stmr. Flora,	Stmr. Atlantic,
W. E. Comer, Master,	J. R. Jones, Master.
Leaves DETROIT every Tuesday at 9 p. m.	Leaves DETROIT every Saturday at 9 p. m.

STEAMER ATLANTIC

Leaves Cleveland every Friday evening at 9 o'clock. For Mackinac, St. Ignace, Cheboygan, Alpena, Oscoda and way ports For freight or passage apply to GEORGE ANDERSON, Agent, foot of Superior st., Cleveland, O. S. B. GRUMMOND, Owner.

TO MACKINAC.

Summer Tours.

Palace Steamers. Low Rates.

Four Trips per Week Between

DETROIT, MACKINAC ISLAND

St. Ignace, Cheboygan, Alpena, Harrisville, Oscoda, Sand Beach, Port Huron, St. Clair, Oakland House, Marine City.

Every Week Day Between

DETROIT AND CLEVELAND

Special Sunday Trips during July and August.

OUR ILLUSTRATED PAMPHLETS

Rates and Excursion Tickets will be furnished by your Ticket Agent, or address

C. D. WHITCOMB, Gen'l Pass. Agent,

Detroit & Cleveland Steam Nav. Co.

DETROIT, MICH.

T. F. NEWMAN, Pass and Freight Agent.

A. J. JACKSON, Ticket Agent.

23 River street, Cleveland, Ohio.

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 30, 1886 at 5 o'clock p. m the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express.....	*2 55 A M	*3 05 A M
No 8, N Y, B & A Express.....	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation.....	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 30 A M	†10 45 A M
No 24, Toledo Accom via Norwalk	†10 30 A M	†10 45 A M
No. 10, New York & Boston Ex..	*11 40 A M	*12 noon
No 12, N Y & B Fast Express.....	*2 10 P M	*2 45 P M
No 2, Night Ex via Norwalk.....	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky...	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express.....	*12 15 A M	*12 25 A M
Cleveland Express.....	*2 15 A M	
No 3, Chicago Express via " ..	‡6 00 A M	
No 25, Mich Accom Norwalk.....	.....	6 30 A M
No 21, Toledo Ex via Norwalk...	†12 50 P M	†6 30 A M
No 5, St Louis Ex via Sandusky..	*10 45 A M	†3 30 P M
No 9, Chi Pac Ex via Norwalk.....	6 15 P M	*10 50 A M
No 31, Elyria ac to Elyria only...	.....	*6 40 P M
No 27. Conneaut Accommodation	†8 10 A M	†4 30 P M

Sunday train for Nottingham—Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper daily on No. 12, leaving Cleveland at 2.45 p. m.; arrive Grand Central depot, New York, 10.30 a. m.

For full information as to trains and counections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

The Nickel Plate!

NEW YORK, CHICAGO & ST. LOUIS RAILWAY.

The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe, speedy and comfortable travel.

Trains leave and arrive at the Union Depot, Van Buren street, Chicago, and N Y, L E & W R'y depot at Buffalo.

Following is the time in effect April 25, 1886, and until further notice:

EASTWARD.	Arrive.	Depart.
Buffalo Passenger	*10 40 A M	*10 45 A M
Chicago Passenger.....	*9 00 P M	.....
Local Freight	* 4 40 A M	* 5 45 P M
WESTWARD.	Arrive.	Depart.
Chicago Passenger	.....	*6 45 A M
Fostoria Passenger	*4 46 P M	*4 51 P M
Local Freight.....	* 5 00 P M	* 5 50 P M

ROCKY RIVER ACCOMMODATION.

Depart—*7:40 a. m., *1:35 p. m.

EUCLID ACCOMMODATION.

Depart—*6 24 a. m, *9:10 a. m,. *5:05 p. m.

*Daily except Sunday.

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination

For information, call on nearest agent of the Company, or address

B. F. HORNER,
Gen'l Passenger Agent,

LEWIS WILLIAMS,
General Manager. Cleveland, O.

PURCHASE YOUR TICKETS VIA THE

BEE LINE--C. C. C. & I. R. R.

The Great Trunk Line to the South and West.

The only line from Cleveland with no change of cars to the Mississippi River. Solid trains and through sleepers to St. Louis, where direct connections are made in Union Depot for all points west.

Practically no change of cars to the

PACIFIC COAST.

The only line to COLUMBUS AND CINCINNATI with complete through train service, making direct connections in Union Depots for all points in the

SOUTH AND SOUTHEAST

Tourists Tickets to numerous points, including the

ROCKY MOUNTAINS.

Fast Express Trains Daily. New and Elegant Cars, A Perfect Roadbed.

For low rates and any information pertaining to railway travel in general apply to CITY TICKET OFFICE, 173 SUPERIOR STREET, CLEVELAND, O.

D. JAY COLVER, Passenger Agent.

J. D. BROWN, Ticket Agent.

A. J. SMITH, General Passenger Agt.,

A BIG OFFER. To introduce them we will GIVE AWAY 1,000 Self Operating Washing-Machines. If you want one send us your name, P. O and express office at once. **The National Co. 2 Dey St., N. Y.**

FOR SALE.

STEAM PASSENGER TUG TEMPEST.

Steel hull 60 feet over all, 10 feet beam, 6 feet hold. Engines fore and aft compound, 8 and 14x12 Otis steel boiler, return flue, 110 pressure. Complete passenger outfit for forty-three passengers. Speed 12 to 16 miles.

Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PROP'R

TERMS OF SUBSCRIPTION:

One year, postage paid.....$2.00
Six months, postage paid..... 1.00
Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

CLEVELAND, O.—G. F. Bowman, corner of Pearl and Detroit Streets.

Evans & Van Epps, Superior street, Cleveland.

R. A. Castner, 254 Detroit street, Cleveland.

ASHTABULA HARBOR, O.—C. Large.

CHICAGO, ILL.—Joseph Gray, 9 West Randolph Street.

CHICAGO, ILL.—August Semper, 345 Noble Street.

BUFFALO, N. Y.—A. C. Brideson, Michigan Swing Bridge.

Also, Miss McCabe, Elk Street, near Ohio.

DULUTH, MINN.—C. F. Johnson, 117 West Superior Street.

MARQUETTE, MICH.—J. A. Vannier.

ESCANABA, MICH.—Wm. Godley.

PORT HURON, MICH.—G. H. Mann.

WASHBURN, WIS.—John A. Jacobs.

SARNIA, ONT.—D. McMasters.

ST. CLAIR FLATS, MICH.—McNiff & Son.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, JULY 1.

THE QUESTION OF INSURANCE IN CASES OF LIMITED LIABILITY.

During the past two weeks several cases relating to the limitation of liability of ship owners have come before the Supreme court of the United States on appeal from Circuit courts. In each of these cases the question of insurance has been considered in its bearing as being part of the interest of the owner in the vessel at fault for the destruction of another vessel without the privity of the owner. These cases involve many fine points. All the cases under discussion being of the same nature we will take that of "Place et al v. Norwich & New York Transportation Company," for analysis in order to show the opinion of the Supreme judges regarding the bearing of insurance on the owner's interest in his vessel. It was held by the circuit court that the owners' interest in his vessel consisting of the value of the vessel after the accident and the freight pending, (that is the freight earned.) If the vessel which causes disaster to another sinks or is totally lost before reaching port the owners of the innocent vessel have no redress and can recover nothing. If the ship causing the loss is insured the owners recover the insurance money and the owners of the other vessel have no lien on it. This was also the ruling of the Supreme court in an opinion deliverd by Justice Bradley, while Justice Matthews, Justice Miller, Justice Harlan, and Justice Gray in an opinion delivered by Justice Matthews dissented.

Justice Bradley in the following points, denied that insurance, at the time of the offense or after the offense could be a part of the owners interest in the ship:

1. That the owner was entitled to a limitation of liability to the value of its interest in ship and freight under the act of 1851. (Sects. 4282-4287 Rev. Stats.)

2. That the point of time at which the amount or value of the owner's interest in ship and freight is to be taken for fixing its liability is the termination of the voyage on which the loss or damage occurs.

3. That it the ship is lost at sea, or the voyage be otherwise broken up before arriving at her port of destination, the voyage is then terminated for the purpose of fixing the owner's liability.

4. That in the present case, the voyage was terminated when the ship had sunk, and that her value at that time was the limit of the owner's liability; and that the subsequent raising of the wreck and repair of the ship, giving her an increased value, had nothing to do with the liability of the owner.

5. That no freight except what is earned is to be estimated in fixing the amount of the owner's liability.

6. That insurance is no part of the owner's interest in the ship or freight within the meaning of the law and does not enter into the amount for which the owner is held liable.

7. That the limitation of liability is applicable to proceeding *in rem* against the ship as well as to proceedings *in personam* against the owner; the limitation extends to the owner's property as well as to his person.

8. That the right to proceed for a limitation of liability is not lost or waived by a surrender of the ship to underwriters.

These points we believe, are well taken if the value of the offending ship is considered after the offense, as has been ruled by admiralty courts many times. The law of 1851 states that the freight unless earned shall not enter into the settlement. But insurance becomes an interest to the owner after the vessel is lost and as that is the time when the computation for liability is made it should be considered as subject to lien and accounted as part of the assets involved, or in other words part of the liability. In a dissenting opinion to the ruling of the court Justice Matthews said that the statute is reduced to the question whether the insurance money paid or payable to the owner in case of the loss of or damage to the ship is to be included in the estimate of the value of the owners interest in it. In defending this position he says: "Whether the value of the owner's interest in his lost or damaged ship, in the sense of the estate, means its money value to him computed with reference to every pecuniary advantage and benefit it brings to him, or whether it means the price brought by the material things which remain when put to sale to the best bidder, leaving him in possession of these legal rights, springing out of and supported by his interest in it, which as a case of insurance, or a right of action against the cause or instrument of its loss, may result in restoring to him in money his ships full original value. It is true, that the Act declared that a transfer of the owner's interest in the ship and freight shall be a sufficient compliance with its conditions, and, by construing this with narrow and literal exactness, this transfer may be confined to the mere wreck and physical remnant of the broken ship, or, if sunk to the bottom of the sea, the mere *spes recuperandi.* But this construction, we think, *haeret in cortice.* The whole language of the Act must be taken together, and nothing less will satisfy its meaning or its policy that such a transfer or payment as will include the full money value to the owner of his interest in the ship, which the statute requires him to sacrifice in order to purchase the immunity which it bestowes on that condition alone. For the policy of the Act was to encourage investments in ships by limiting losses from the risks of navigation to the amount and value of the investment, and that includes the insurance recovered by force of a premium which, when paid, constitutes part of the investment, which restores it when lost or impaired. Insurance adds to the ship a value of its own, by imparting to the subject of insurance the quality of reproducing itself or its value in case of injury or loss. It was the policy of the Act to encourage the shipping interest by a protection against the unlimited personal liability of ship owners for the acts and defaults of their agents and representatives, with reasonable regard to the rights and interests of others engaged in the same pursuit, and not to put a premium on its destruction by taking away from ship owners a principal motive for regarding either their own or the interest of others. And the language of the statute seems to us not only to bear such a meaning, but fairly to imply it. For certainly every pecuniary advantage or profit which the ownership of a thing actually secures by necessary operation of law may be estimated to ascertain the value of the thing to its owner. The insurance, which in case of damage or loss repairs and restores the vessel or stands in its place, and is its product and earning, being the purchase money paid for it by virtue of the contract which assumes the risks insured against, is strictly an accessory of the ship insured, as much so as to the freight which she earns, and the express mention of the latter, as part of the interest to be transferred, is not to be held as excluding insurance because not expressly mentioned, for the reason that the mention of freight is sufficient to characterize the nature of the owner's interest to be valued, as including not merely the material remnants of the broken or sunk vessel in specie, but as well that which it produces, and which is in truth her representative, and of which it is the meritorious cause and consideration. For the insurance is the price paid by the insurer to the insured as the purchase *pro tanto* of the thing insured when damaged or lost, and, in the hands of the owner or due to him, still remains as the value of an interest in the ship as that existed when damaged or lost, and ought to be accounted for as part of that value as much so as freight paid, though no longer freight money in kind, must still be valued and accounted for by the owner who has received it. The insurance money is the interest of the owner in the ship reduced to money, and, therefore, most accurately measures its value; for, in cases of total loss, actual or constructive, all interest of the owner, even though it be a mere *spes recuperandi*, on payment of the insurance money, passes by operation of law to the insurer. Yet that very interest, thus the property, on abandonment or payment of a total loss, the title to which passes to the insurer, is the same interest, the value of which, by the terms of the statute, must be decreed to the libelant to exonerate the owner from personal liability to any additional extent."

The American and English statutes of limited liability are unequal in effect. While under American ruling the amount of the liability is taken or noted after the disaster, in England the owner becomes liable to the value of the vessel and freight pending, immediately before disaster or collision. Under the same system of argument we would advance the opinion that in the English admiralty courts the owner's interest in the vessel in relation to the item of insurance would be absolved in computing liability, whereas in the United States it becomes one of the prime items of computation, the condition of the boat, and the time of assessing value being reversed. That is if the American suitor should commence his action in England he would recover his debt; if he should commence it in his own country he would get nothing if the vessel proceeded against was a total loss. Suppose, for instance, that after the collision which gave to the libelants the lien and right to proceed against the offending vessel for the loss and damage, the latter has been effectually sold, while still pursuing her voyage, and the title transferred to a purchaser, would not the purchase money, either in the hands of the vendor when paid, or in those of the vendee until paid, notwithstanding the subsequent total loss of the ship itself during the same voyage before reaching her home port, be the measure of the value of the owner's interest to the full amount of which the injured party might recover? It seems to us there can be but one answer to that question, and that in the affirmative. It seems to us eqnally clear that no distinction can be drawn between the case just supposed and that of insurance. For the policy of insurance, in cases of total loss is analagous to a contract of sale, by which the ship, or what remains of her, or the hope of her recovery, become on the happening of the contingency the property of the insurer, and the insurance money payable, the price, as upon a conveyance. In both cases the interest of the owner is transferred from the thing to the money which represents it and stands in place of it, and the money is the measure of the value of the interest of the owner in the thing, for it is the price and equivalent paid for it. We can not bring ourselves to think that congress intended by limiting the personal liability of the ship owner, in cases where previously his whole fortune was responsible for the wrongs committed through his agents and representatives, to the value of his interest in the ship, which was the instrument of the injury, to permit the innocent party suffering the damage to go entirely without redress, when the vessel in fault, by disaster subsequently happening during the whole period of the same voyage, has been totally lost, and the owner, by a contract in force when the wrong was done, receives full compensation by way of insurance for the loss he has incurred, and has thus restored to him the offending vessel, not indeed, in specie but in value. It seems to us it is the meaning of the statute that the owner shall receive no pecuniary benefit from his interest in the vessel doing the wrong, which shall not inure to the compensation of him who has suffered the loss which it has caused. And that meaning congress has taken pains to express by the use of the word "interest," as the subject which, or the value of which, the owner must surrender and transfer or account for, as the price of his immunity from personal liability, because it is appropriate to convey the idea, being large enough to embrace, not the mere legal title to the vessel or the wreck and remnant of her which may be saved from the perils of the voyage, but every claim and benefit which constitutes to the owner its substance and value, capable of measurement in money.

We do not, therefore, hesitate to say that the time is approaching when owners of large and valuable vessels will appeal for the rescinding of the law which provides for the limitation of liability.

FAVORABLE report has been made on the bill for the establishment of a lighthouse at North Point, Milwaukee.

EVERYTHING works togeher for good this season. Congress has passed a bill creating the office of inspector of hulls at Duluth.

IT is a pleasure to note that Governor Hill has put his signature to the bill for the lengthening and improving the pier locks on the Erie canal.

IN the Senate Mr. Frye, from the committee on commerce, reported favorably a bill to amend the laws relating to the inspection of steam vessels. The bill provides for the payment, out of the treasury, of the expenses of steamboat inspectors. Mr. Frye said the bill was in answer to a recommendation of the President. The vessel owners of the country, Mr. Frye added, were under obligations to the President for his approval of the shipping bill, and for his recommendation for supplementary legislation to provide for the expenses of the steamboat inspectors. Congress ought at once to provide that legislation. Acting Secretary Fairchild has notified inspectors of steam vessels that fees for inspecting and examining steam vessels and for licensing officers of the same are not to be collected after July 1, the date on which the new shipping law goes into effect. They are, however, to inspect and make quarterly reports of such inspection together with a statement of the amount of fees which would have been received under the present law. In view of the fact that the abolishment of the fees for licensing officers of steam vessels may induce unworthy persons to make application for such licenses, inspectors are directed to exercise increased vigilance in scrutinizing the claims and qualifications of all applicants for license as master, engineer, pilot or mate that may come before them, and not to grant such licenses to any person whatever unless such person is fully up to the requirements contemplated by law.

LAUNCH OF THE SS. CHARLEMAGNE TOWER, JR.

The launch of this fine steamship, for the Wilson Transit Line, at Quayle's yard last Saturday was witnessed by a multitude of people, all of whom testified to their appreciation of the skill of the builders and the enterprise of the line ordering her construction.

The launch, as was announced in the RECORD last week, was attended by a ceremony of christening, unusual at this port, the office being gracefully performed by Miss Emma R. Ely, daughter of Hon. George Ely. As the ropes were cut the boat, well packed up, slid on an even keel and dropped into the turbid waters of the Cuyahoga, the gentle maiden struck the bow of the new steamer with a "hammer," pronouncing the name of Charlemagne Tower, Jr.

Previous to the launch Mr. George Ely delivered an address to the Wilson Transit Line, represented by Captain Thomas Wilson, the builders, and the people assembled, eulogizing the enterprise and skill displayed in the construction, in the following well chosen words.

"LADIES AND GENTLEMEN: We are on the decks of another and the latest contribution of Cleveland to the merchant marine of the great lakes. The building and the launching of a ship never fails to command our interest. There is the thought of the ship in the brain of the builder. Its evolution through plan and drawing and the successive steps of construction from keel to topmast, until the glorious creation of human skill and industry is ready with sail and steam for the uses of commerce, is a process of beauty; and no wonder the culmination of it, in the commitment to her destined element, kindles our pride of achievement. But not only has there been the evolution of the ship there has been also the evolution of ship building. The Messrs. Quayle and Captain Wilson and the host of other Cleveland shipbuilders and ship owners have sent out of this harbor many a gallant ship. But what changes in size and carrying capacity during the last two decades? With every advancing necessity of commerce, deeper channels, and deeper harbors, not only has increase of size and tonnage come, but through the rise of steam a vast augmentation of power and influence. In fact, so extensive has been the substitution that sail has now become incidental and auxiliary to steam power. Here and there yet lingers upon the lakes a few of the earlier constructions, once our pride; but now sweeping past them in massive strength and grandeur go the creations of the shipyards of this day, representing the wonderfully changed conditions of our lake commerce. The iron ore carrier of twenty years ago brought 350 to 450 tons of ore to Cleveland docks by sail and the average of her round trip to Lake Superior was twenty days. This vessel with steam and sail will, averaging ten days only on the round trip, bring to our docks from the mines of Minnesota 2,800 to 3,000 tons. This is figuring on the 20 feet of water which we hope to have through the St. Marys river and by the construction of the new lock at the Sault within five years. But this reference to the mines of Minnesota sug-

gests the significance of the name borne by this vessel, Charlemange Tower, Jr. Captain Wilson seems fairly to revel in suggestions of the far northwest. With keen foresight of the sources of future business and the region whose traffic must come in large degree to the lakes, he reaches across the continent for names for his fleet. The steamer Hiawatha and her consort, the Minnehaha, respectively, recognize the poetic sentiment, but Kasota, Tacoma, Wallula and Spokane certainly contain business propositions. They mean the mountain territories and the Pacific coast. This vessel, however, is to directly recognize in the name of Mr. Tower the new and important relations to our city of the opening and development of another mining district. To the enterprise and capital of Charlemagne Tower, of Philadelphia, long identified with the manufacturing and mining interest of Pennsylvania, and of Charlemagne Tower, Jr., now a resident of Duluth, and managing the railroad and mining interests of the Minnesota iron company and their associates, are we indebted for the very substantial contributions already made and hereafter to be increased to the business of our Lake Erie ports by the development of the Vermillion iron district on the north shore of Lake Superior. The legend therefore of this single name along the lines of the beautiful vessel is at once a graceful and proper recognition of the agency through whom these new relations to the trade of our city have been created. And now, congratulating you, Messrs. Quayle and Captain Wilson, upon successful completion of this noble product of your combined skill and capital, we give the Charlemagne Tower, Jr., godspeed. Welcome always, noble ship, to Cleveland harbor."

All interesting details of the construction of the Tower were given in last weeks RECORD. She will go into the ore and grain trade under command of Captain James Lowe, with George Averill as chief engineer.

OBITUARY.

FRANK A. KENNEY.

It is with deep sorrow that we announce the death of our friend and correspondent, Mr. F. A. Kenney. He died at the home of his parents in Sandusky on the 17th of June of consumption, after an illness of some years. Several times has this dread disease confined him to his home for weeks, but on each occasion his courage and tenacity of life brought him around, only to be finally vanquished by the great enemy of mankind. Mr. Kenney was a young man of sterling qualities, persistent in his desire to do good and to make friends of every one. His communications in the MARINE RECORD have been read with interest by all, and being thoroughly conversant with lake matters his statements were always reliable and to the point. He was kind and generous, with keen, sensitive ideas of right and wrong, sociable and genial in disposition. He died in the harness and his worth is testified to by the Sandusky Local, in a neatly made monument bearing the inscription, "Unto him cometh peace forevermore."

THE INTER LAKE YACHT ASSOCIATION.

The second annual regatta of the association will take place under the auspices of the Michigan Yacht Club on Lake St. Clair, near Detroit, on Monday, July 5th, and Tuesday, July 6th. The squadron cruise of the association will immediately follow the regatta and finish at Put-in-Bay on the 10th.

OFFICERS OF THE INTER-LAKE YACHTING ASSOCIATION.

Hon. G. W. Gardner, Commodore; H. C. Hart, Vice Commodore; A. W. Machen, Rear Commodore; J. S. Williams, Secretary and Treasurer; Dr. A. E. Claypoll, Fleet Surgeon; E. P. Day, Measurer; George Gascoyne, Assistant Measurer; George H. Ketcham, Surveyor.

BOARD OF DIRECTORS.

Hon. George W. Gardner, Chairman; C. W. Kelly, Cleveland Yachting Association; Ex-Com. O. W. Baker, Michigan Yacht Club; G. W. Bills, Ohio Yacht Club; A. W. Machen, Toledo Yacht Club; G. H. Beebe, Put-in Bay Yachting Association.

REGATTA COMMITTEE.

W. Scott Robinson (C. Y. A.) Chairman; J. H. Clegg, M. Y. C.; M. T. Huntley, O. Y. C.; J. H. Hepburn, T. Y. C.; G. H. Beebe, P. B. Y. A.

OFFICERS OF THE MICHIGAN YACHT CLUB.

Henry C. Hart, Commodore; Alfred E. Brush, Vice Commodore; Arthur J. Phillips, Rear Commodore; Arthur F. Albertson, Secretary; Fred Fayram, Treasurer; E. Brady Wendell, Measurer; A. Thuner, M. D., Fleet Surgeon.

BOARD OF DIRECTORS.

H. C. Hart, Alfred E. Brush, Arthur F. Albertson, Fred Fayram, H. B. Scott, John H. Clegg, Bernard Youngblood, Frank H. Reeves, Chas. F. June.

PROGRAMME.

Sunday, July 4. The reception committee of the M. Y. C. will meet yachts arriving from Lake Erie ports, at the mouth of the Detroit river. Tugs will be provided to take yachts to M. Y. C. anchorage.

Monday, July 5. The Inter-Lake Yachting Association races, on Lake St. Clair, start from off Grosse Point, at 10:30 a. m. Second, fourth and fifth class yachts will compete.

Tuesday, July 6. Inter-Lake Yacht Association races, over same course, starting at 10:30 a. m. First and third class yachts will compete.

Wednesday, July 7. Review of all yachts of the association, by Com. Geo. W. Gardner and staff, at 9:00 a. m. Start for the cruise among Put-in-Bay Islands, at 10 a. m.

Friday, July 9. Squadron cruise among Put-in-Bay Islands.

Saturday, July 10. Breaking up of meet.

LAKE SHORE EXCURSION TO THE ROCKY MOUNTAINS AND CALIFORNIA.

The L. S. & M. S. railroad have arranged to run an excursion to San Francisco by way of Chicago, Omaha, Denver, Ogden and Salt Lake, leaving Cleveland July 20, 1886—offering their patrons their finest lines across the continent, and at lower rates than ever made before. Special inducements to members of the Grand Army and their friends. For particulars call on or address M. E. Gaul, passenger agent of the L. S. & M. S. railroad, 173 Superior street, Cleveland, O.

TEACHERS' EXCURSION.

The Lake Shore & Michigan Southern railway will sell excursion tickets to Topeka, Ks., and return at one fare for the round trip to all teachers wishing to attend the National educational association held at Topeka July 13 to 16. Tickets will be on sale at the city ticket office, 173 Superior street, and Union depot on and after July 6. For further information call on or address M. E. Gaul passenger agent, city office.

[*Around the Lakes Continued from 1st Page.*]

MILWAUKEE.

Special to the Marine Record.

There is a dearth of marine news here at the present time, so you will have to be satisfied with a retrospective account of things generally. There are a few coalers arriving; and some grain being shipped, so much, in fact, that Milwaukee is again prominent as a grain shipping port; long may she wave.

The propeller Alaska, in leaving port, came very close to making a wreck out of the scow Minnehaha; as it was she jammed her slightly, though not enough to amount to anything.

I notice in your reports of speed that the H. J. Jewett and Onoko have each made remarkable time and I would like to call your attention to the time made by the steamer D. Ballentine in a trip to Buffalo and return. She made the round trip in eleven days and seven hours with the schooner Northwest in tow. As we all know that the Northwest is larger than a small sized canaler and carries an elevator or coal mine as ballast, this time is considered equally as good as any made by any of the racers, and Captain Tinney has good reason to be proud of his boat and his engineer, Frank Caton, as well. The man that keeps the machinery in shape necessary for such running is entitled to his share of the praise also.

At Wolf & Davidson shipyard things are humming, W. H. Wolf's in his shirt sleeves superintending his baby yacht, (by the way he is undecided as yet whether to name it Henry Ward B. or Wm. Jamison, but thinks that Tinney is entitled to the most honors.) Mr. Davidson has an eye to things generally, and Jim Butler's mouth gets wider and wider as each plank goes to its place on the yacht. The propeller Lawrence was in the drydock yesterday for a new wheel. The schooner Chas. Foster is getting some new covering board and stanchions; the schooner Eliza is on the boxes for a recalking.

Captain Ed. Thorp brought the schooner John Raber from Cheboygan in a leaking condition. She was docked and thoroughly recalked and repaired. Ed thinks the Leviathan is a darling and her four big steam pumps incomparable.

Wolf & Davidson must be credited with having accomplished the greatest feat of docking ever done on the lakes. They docked the large four masted schooner J. H. Rutter with her cargo of 65,000 bushels of corn, drawing 15½ feet of water, and had her high enough on the blocks to put plank in her bottom. Murphy has done the unparalleled wrecking, and this is the unparalleled docking; no necessity to elevate a cargo to get in the dock here.

Captain Ben Chambers, during his last trip here, blossomed forth as a progressive eucherist of the first water.

CAPTAIN KIDD.

KINGSTON.

The price paid for the tug Mixer by the Dominion Bridge Company was $3,500.

Captain D. H. Murdock was accidentally drowned while crossing Grand river, Utah.

DETROIT.

Special to the Marine Record.

June 29.—I am reminded by the date of this communication just twenty-six years ago that two of our lake vessels, the bark Norman and brig John H. Harmon sailed from Chicago with cargoes of corn, for Boston, Mass., the former 345 tons, the latter 275 tons burden; and also, the schooner Gem, 306 tons, for the same destination. The Harmon was sold at Boston for $4,000, and was subsequently lost between Cape Breton and Halifax. The Gem, coal laden, was wrecked in Pigeon Bay, Lake Erie, in the month of October, 1871.

L. B. Demass, son of John Demass, has opened a ship broker's office in this city, on Griswold street, and as there are several in full bloom at this port, vessel masters or owners can not fail to be accommodated with cargoes at almost any time.

John Craig, the ship builder at Trenton, whose business for a short time past has been lying dormant, has renewed operations by the employment of some twenty men, including laborers on the new vessel he has on the stocks which is now being planked.

Captain E. Thomas, of this city, sold the other day, his vessel, the W. H. Rounds, to Toledo parties, for $6,500, cash down. She was built in 1875, and is 308 tons burden.

The propeller Arctic, of the Lake Superior Transit Company line, has brought from Hancock this season seven cargoes of copper to this port, aggregating 2100 tons, and is expected here to-day with 400 tons more.

Towing vessels through the rivers and straits, which, of late years, has been rapidly on the decline, owing chiefly to the increase of steambarges, the decrease of tugs and the few of those left taking to other business, was first started up forty-two years ago, the steamer Romeo being the first. Occasionally, however, some of the few tugs left pull through with quite a number, as of yore. The tug W. A. Moore passed down on Saturday, with no less than eight on the string, which is set down as the champion tow of the season. All were deep loaded with ore or grain, with an aggregate of 4,000 tons.

Moffat & MacVenn chartered during the past week the steamer C. N. Pratt and consort, lumber, French River to Buffalo, at $1.65. The Pratt takes a quantity of chain to French River at $3 per ton. The schooner Augustus Ford, lumber, Alpena to Detroit at $1.13. Schooner Corsican, cedar ties, Cheboygan to Fairport at 6½ cents each. L. B. Demass chartered the barge Church for lumber, the memoranda of which I have lost.

Captain Duncan McLachlan, and the Macs are legion just now hereabout, but in this instance I refer to the social and genial Scot, of the Idlewild, who has been navigating with much caution and prudence for the past twenty years, beginning at the lowest ratlin and climbing deservedly aloft until attaining his present position. His present command has been for six years, continuous, by promotion, from the steamer Evening Star, which he also sailed. Mac is a man of few words, and what he says, you may rest assured, is well meant. Young and somewhat bronzed, there are still better positions in store for him.

The propeller Atlantic, owing to a mishap in the Straits, did not reach Cleveland on her last trip down, and instead went into drydock here for repairs. She left again Saturday evening on regular time.

Captain Blanchard's fleet of six vessels arrived here on Thursday from Traverse City, twenty-four hours ahead of their regular time.

The tug Admiral Porter came up from Ashtabula with three large loaded vessels, against a heavy head wind and sea, on Thursday, which shows that her towing qualities have been by no means lessened.

The tug Metamora, which was built at Cleveland twenty-two years ago, and was first sailed by the late Captain Bob Hackett, is now engaged in towing timber vessels from Georgian Bay to Kingston. In her day she was the champion over all other tugs in these waters.

The steambarge Ira Chaffee left here on Thursday evening with a tow for Toledo, and on reaching Grassy island one of them, the George Worthington, came in collision with the barge Magnet which lay at anchor. The Worthington got the worst of it, and was towed back for repairs.

The propeller Saginaw Valley has made nine trips this season, and during that time has transported two millions of shingles each trip she has made.

The steambarge Calumet was inspected at this port on Friday, and in the meantime was placed in the Detroit drydock for overhauling. The barges Ironton and Case were also attended to at the same dock.

The new steamer now in frame at the Detroit drydock and ribboned, is undergoing an improved process of iron strapping and otherwise ironed. The straps extend from the topsides to well under the bottom, where they meet and are thoroughly bolted to every frame the whole distance. In point of strength she will have no superior on fresh waters. As her completion is not urgent, the work will be carried out in the most approved and substantial manner.

The new steamship Spokane, launched recently in your city, passed up the other day, and attracted much attention from observers along the wharves. Everybody asked where the d——l did that name come from? This shows that among the numerous devises there is something in a name.

The tug Kate Williams left here on Friday with a party of wreckers for Presque Isle, Lake Huron, for the recovery of the machinery in the tug Kate Moffat, burned a year ago last May, and run ashore in twelve feet of water.

The tug Hercules, owned by Captain Wm. A. Mills, and one of his harbor fleet, took fire early on Thursday morning and narrowly escaped total destruction. It originated in the locality of the engine, while all on board were asleep, but all got ashore without harm. The damages are roughly estimated at $1,500. She will soon be in readiness for business again.

The steamer Chief Justice Waite, with excursionists, came up on Thursday from Toledo, took in the city, and left quietly and peaceably.

The propeller Oconto, passed down on Saturday, her first movement this season. She is now sailed by Captain J. H. Martin.

The propeller Byron Treria has gone into the Detroit drydock to arrange her stern bearings and for repairs to her machinery.

A party was here on Saturday to engage wreckers and a sub-marine diver to recover the cargo of the bark W. H. Vanderbilt, which sprung aleak and sunk at Long Point some time since.

The business on the Detroit and New Baltimore route never was better, steamer Baltimore arriving yesterday with thirty passengers, and a full cargo, including seven head of cattle.

HALL.

PORT HURON.

A short distance below Port Huron on Sunday morning the officers of the steamer City of Mackinaw found the body of a dead man on board. It transpired that he was a deck hand who shipped the previous night, name unknown. He was about 35 years of age, dark hair and weighed about 180 pounds. Death was probably caused by heart disease.

The steamer Flora was detained here by a breakage in her machinery.

The schooner Ariel was in Dunford & Alverson's drydock during the week receiving repairs.

S. A. Murphy has been offered $15,000 for the wrecked propeller Quebec, but he refused the amount.

The tug Wm. A. Moore passed down with eight vessels in tow. This is the largest tow of the season.

Work on the barge Morley is being rapidly pushed along. There is now 40 men employed on her. She has got to be ready to sail July 15th.

Last week the tug Mocking Bird left Grand Island, Lake Superior, for Bay City with 4,000,000 feet of raft—the largest ever towed by any tug before.

DULUTH.

The Negaunee is having her hull repainted at the Northern Pacific dock.

The Kittie M. Forbes brought the first cargo of lime stone for Corrigan's lime kilns.

The R. R. Ranney blew out her steam chest upon her arrival in port Monday. But slight damage was done. She is being repaired at the Northern Pacific dock.

The A. Booth is laid up for the present and is receiving a through overhauling. Her cabin is being repainted and when completed she will be even handsomer than before.

The engine and other machinery for Seeler & Owens, new sawmill at Tower was taken upon the Dove. The mill will be in running order in two weeks and will employ seventy-five men and turn out 100,000 feet of lumber per day.

M. E. Chamber's tug James Bardon was out in the bay and her odd appearance caused many a mariner to shudder as he thought of "Flying Dutchman," or some similar piratical craft. The Bardon needs a little ballast on her bow.

Williams, Upham & Company's dredge No. 7 was taken to the docks and some slight changes made to the dipper. The dredge was taken to Fort William, Ont., by the tugs J. W. Williams and John Martin. There are still five dredges at work in the harbor.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record.

CHAPTER LXXVII.

The passage of vessels from the lakes to the ocean, which took its rise as early as 1844, and was more generally entered into in 1856 and subsequent years, did not at any time meet the expectations of those who made the venture. The causes might have been foreseen and were obvious for several reasons. In the first place vessel cargoes were limited in quantity, owing to the canals leading from the lakes to the ocean which would not admit the passage of vessels carrying beyond 20,000 bushels of grain and a like proportion of tonnage as regards other kinds of freight. To these difficulties may be added canal tolls and port charges, which were, to say the least, exorbitant. Why then, it may be asked, did so many venture in the undertaking? To this it may be briefly stated that during that period freights between New York and Liverpool commanded a higher figure than ever previously known, while on the other hand the lake marine was visited by depression equal to any that had ever taken place on fresh waters. This stagnation of business came on in 1858, and was foreshadowed by those of previous years. A large number of vessels were lying idle in nearly all the lake ports, while the few that were employed worked with the margin on the wrong side of the ledger. The vessels that went to sea were no longer required here, and the anticipation of disposing of them in foreign countries or finding employment in coasting while there, stimulated many owners to hazard the venture. While a few were successful in the latter move others were disappointed, and it may be added that from first to last, the lake and ocean trade never proved a success.

In the following table we present a showing of the vessels thus employed from the beginning, cargoes, points of shipment and destination. As it will be seen, quite a number having lumber cargoes went no farther than the sea coast, yet the results were much the same on either hand. The first voyages were made from Lake Ontario to Liverpool, and not until 1856 were shipments made from the upper lakes:

1844—Brigantine Pacific, Captain George Todd, wheat and flour, Toronto to Liverpool.

1846—Schooner Lilly, Captain Hunter, staves, Kingston to Liverpool.

1847—United States revenue steamer Dallas, Oswego to New York.

1848—Schooner Lilly, Captain R. Gaskin, flour, Kingston to Liverpool.

1849—Brigantine Eureka, Captain William Munroe, passengers, Cleveland to California.

1850—Schooner Sophia, Captain R. Gaskin, flour and wheat, Kingston to Liverpool; propeller Ontario, Buffalo to California; schooner Scotia, staves, Kingston to Liverpool.

1853—Schooner Cherokee, Captain R. Gaskin, flour, Kingston to Liverpool.

1854—Bark Arabia, Captain John Calder, staves, Kingston to Liverpool; schooner Cataraqui, Captain R. Gaskin, staves, Kingston to Liverpool; schooner Eliza May, Captain Hunter, staves, Kingston to Liverpool.

1855—Bark Reindeer, Captain Farwell, staves, Kingston to Liverpool.

1856—Schooner D. Richmond, Captain D. C. Pierce, staves, Detroit to Liverpool.

1857—Schooner Maderia Pet came over from Liverpool and returned with staves; bark C. J. Kershaw, Captain Moore, staves, Detroit to Liverpool; ship City of Toronto, general cargo, Toronto to Liverpool; bark Reindeer, Captain Farwell, general cargo, Toronto to Liverpool.

1858—Schooner Indian Queen, staves, Toronto to Liverpool; bark Chieftain, Captain B. S. Wolvin, staves, Detroit to Liverpool; bark H. E. Howe, Captain Day, lumber and staves, Detroit to Liverpool; brig Black Hawk, Captain S. Alexander, staves, Detroit to Liverpool; schooner Col. Cook, Captain Humphrey, staves, Detroit, to Liverpool; schooner D. B. Sexton, Captain T. A. Burke, staves, Detroit to London; schooner Correspondent, Captain Robert Jeffrey, wheat, Detroit to Liverpool; schooner C. Reeve, Captain S. M. Hall, staves, Detroit to Liverpool; schooner Harvest, Captain H. Rummage, staves, Detroit to London; bark E. T. Adams, Captain Nelson, lumber, Toronto to Liverpool; bark D. C. Pierce, Captain Thos. Kidd, staves, Detroit to Liverpool; bark C. J. Kershaw, Captain Moore, lumber and staves, Detroit to Liverpool; schooner R. H. Harmon, Captain Huntoon, staves, Detroit to Liverpool; schooner J. F. Warner, Captain A. R. Manning, staves, Detroit to Greenock; bark Pamelia, J. Flood, Captain Anderson, lumber, Green Bay to the West Indies.

1859—Schooner G. D. Douseman, Captain J. M. Smith, staves, Detroit to London; schooner C. H. Walker, Captain Sol Rummage, staves, Detroit to Liverpool; schooner Gold Hunter, Captain J. W. Pomeroy, and St. Helena, Captain S. M. Hall, staves, Detroit to Cork; bark Chieftain, Captain B. S. Wolvin, staves, Wallaceburg to Liverpool; schooner Hugh Barclay, Captain C. J. Chadwick, staves, Bear Creek to London; brig Black Hawk, Captain S. Alexander, wheat, Chicago to Liverpool, schooner J. F. Warner, Captain A. R. Manning, staves, Detroit to Greenock; schooner M. S. Scott, Captain Nelson Blend, walnut, St. Joseph to Cowes; schooner R. H. Harmon, Captain Thos. A. Burke, staves, Detroit to Liverpool; brig J. G. Deshler Captain Charles Gale, staves, Detroit to Liverpool; schooner Evelyn Bates, Captain J. Peterson, staves, New Baltimore to Liverpool; schooner Grand Turk, Captain J. H. Starkweather, ship plank, Detroit to Hamburg; bark Allies, Captain A. Farwell, staves, Detroit to Cork; schooner Vanguard, Captain A. Davis, staves, Cleveland to Liverpool; schooner Republican, Captain Coville staves, Milan to Cadiz; bark D. C. Pierce' Captain Thomas Pennington, staves, Detroit to Liverpool; bark W. S. Pierson, Captain A. Root, staves, Black River to Greenock; bark Massillon, Captain Lloyd, staves, Cleveland to Liverpool; schooner Messenger, Captain J. M. Averill, lumber, Buffalo to Boston; schooner Adriatic, Captain J. B. Hall, staves, Ashtabula to Boston; brig Caroline, Captain D. N. Malott, staves, Detroit to Liverpool; bark Magenta, Captain Hopkins, staves, Green Bay to the West Indies; schooner Indus, Captain Humphrey, lumber, Milwaukee to Boston; schooner Union, Captain W. Zealand, Hamilton to Liverpool; schooner Muskingum, Captain Higgins, walnut, Toledo to Boston; schooner Clifton, Captain Mercer, lumber, Sandusky to Richmond, Va.; schooner Energy, Captain R. Dill, oats, Oswego to New York; schooner Typhoon, Captain Talcott, coal, Detroit to Boston, Mass.; brig Sultan, Captain Webster, coal, Buffalo to New York; schooner Alida, Captain Sheldon, staves, New Baltimore to Boston, Mass.; schooner Ada, Captain Clifford, walnut, St. Joseph to Providence, R. I.; schooner K. L. Bruce, Captain Mixa, and schooner Kyle Spangler, Captain A. Nicholson, walnut, Toledo to Boston; schooner Metropolis, walnut, Toledo to New York; schooners W. B. Castle, Captain Nickerson, and Sarah Hibbert, Captain Huntoon, coal, Cleveland to New York; schooner Valeria, Captain Thos. Donahue, lumber, Cleveland to Boston, Mass.; tug Uncle Ben, Captain F. S. Miller, lumber, Buffalo to Boston; tug Decatur, via Mississippi, from Milwaukee to the seaboard; tug W. F. Cushing, Chicago to Portland, Me.; tug Perry, Lake Michigan to New Orleans; tug President, Milwaukee to the seaboard.

1860—Schooner Bay of Quinte, lumber, Toronto to Liverpool; schooner Geo. Laidlaw, Captain Campbell, oats and peas, Toronto to Liverpool; schooner West Wind, lumber, Toledo to Boston, Mass.; schooners Fashion, Captain James Draper, and Geo. W. Holt, Captain Chas. Hanscome, walnut, Toledo to Boston, Mass.; schooner Neptune, Captain Robert Gaskin, staves, Toronto to Liverpool; schooner Illinois, Captain B. S. Wolvin, staves, Wallaceburg to Liverpool; brig J. G. Deshler, Captain Charles Gale, staves, Detroit to Liverpool; schooner W. H. Merritt, Captain McDonald, timber, Wallaceburg to Liverpool; schooner Sophia Smith, Captain Butler, walnut, Toledo to Boston, Mass.; schooner White Cloud, Captain McTaggart, lumber, Green Bay; schooner Charmer, Captain Comstock, wheat, Buffalo to New York; bark Plymouth, walnut, Hamilton to Liverpool; bark J. F. Park, Captain Duncanson, timber, Belle River to Liverpool; bark Pride of Canada, Captain Wales, staves, Toronto to Liverpool; steamer Northerner and steambarges Peerless, New York, America, Canada, Arabia, Lake Ontario to New York city; bark Niagara, Captain Hamilton, staves, Hamilton to Liverpool; bark Norman and brig J. H. Harmon, corn, Chicago to Boston; schooner Valeria, Captain Nickerson, lumber, Cleveland to Boston; schooner J. F. Warner, Captain A. R. Manning, staves, Detroit to Greenock; brig Caroline, Captain D. N. Malott, staves, Detroit to Liverpool; schooner St. Albans, Captain Scott, walnut, Chicago to Liverpool; bark Chieftain, Captain McGlashan, flour and meal, Toronto to Liverpool; bark E. S. Adams, Captain Nolan, and bark Alexander, Captain Muir, timber, Wallaceburg to Liverpool; schooners Twin Brothers, Captain W. A. Smith and Twin Sisters, Captain W. Jackson, walnut, Toledo to Boston; schooner Gem, Captain Mercer, corn, Chicago to Boston; schooner Forest City, Captain Lovell, lumber, Detroit to Boston; schooner R. N. Harmon, Captain T. A. Burke, staves, Detroit to Liverpool; tug Salvor, Captain T. M. Hall, Buffalo; propeller LaCrosse, Buffalo to Galveston, Texas; tug Gordon Grant, Milwaukee to the sea coast; tug Geo. O. Vail, Captain Earl, Buffalo to New York; schooner Chief, Captain John Norris, walnut, Detroit to Boston; sloop Chance, Captain Jas. Dunn, Cleveland to New York; bark T. F. Park, second trip, Captain Duncanson, wheat, Milwaukee to Liverpool; steambarge Maple Leaf, Lake Ontario to New York city.

A continuation of the foregoing will appear in a future issue, with other information more or less important.

QUEEN CITY LIFE SAVING ASSOCIATION.

TCTONTO LIFE SAVING STATION.
TORONTO, ONT., June 16.

To the Editor of the Marine Record:

The Queen City Life Saving Association is composed of many of Toronto's most prominent citizens, and consequently possesses a powerful influence in moulding public opinion to the urgent necessity that exists for providing better means for the preservation of life on Toronto Harbor. The Queen City Association hopes by organizing a first class life saving crew, on the same principle as the United States life saving service, to form the nucleus of a regular life saving service for the Dominion of Canada, which they hope will extend over this broad country until every dangerous place in our land is provided with first-class life-boat stations and equipped with the best apparatus and manned by first-class crews of experienced surfmen, ready at the call of duty to go to the rescue of ship-wrecked persons.

You are well aware that there is an ample field for this humane work in this Dominion, and it will be my earnest endeavor to create a life saving service which will, I trust, prove worthy of the instruction I received when in the United States life saving service. You will see from the accompanying paragraph that we have made a start:

The Queen City Life Saving Association has been organized for the purpose of extending a knowledge of restoring the apparently drowned, the safest and best way to rescue the drowning, and for the practice of swimming when fully clothed, thereby giving its members the fullest confidence in cases of emergency. They intend, if sufficient encouragement is given, to establish a first-class life-saving station on this side of the bay, and will drill and furnish a first-class crew. A Dobbins' surf-boat, self-righting and self-baling, all complete, can be had for $500. The association will, however, for the present secure a boat here for purposes of practice and drill. Captain W. D. Andrews, who holds first-class certificates from the United States life saving service, will act as instructor, Dr. White as medical officer, and J. L. Rawbone as secretary. The hearty support of all interested in the above objects is asked. Address all letters to the secretary, 95 King street East.

Yours humanely, W. D. ANDREWS.

THE SS. ALGOMA.

SS ALBERTA, SAULT, June 23.

Special Correspondence to the Marine Record.

I visited the wreck of the ill-fated steamer Algoma, June 21 and 22. Her stem lies high up on the rocks with heavy list to port. She is broken in two just forward of the boilers, and the engines are partly above water; the forward part is all under water. The C. P. R. have settled with the underwriters and allowed them a certain sum for all that remains of hull and cargo, and have let the contract of wrecking to Merriman & Fowler, of Port Huron, for $6,500, the machinery to be landed on dock at Oweh Sound and cargo at Port Arthur in one month's time; if longer time is taken price to be $6,000.

The wreckers are now hard at work with the tug George Hand and schooner L. L. Lamb and wrecking outfit, and have already saved considerable of the cargo.

To-day while the divers were at work between docks they discoveaed a dead body lying partly under the iron cargo, and cannot get it until the cargo is removed.

The wreck lies about two and a half miles to the eastward of Rock Harbor lighthouse (now discontinued), and about ten miles from the most easterly point of Isle Royal.

The divers find it very difficult to work, owing to the coldness of the water.

WANDERER.

BEE LINE EXCURSION TO TOPEKA.

The Bee Line will sell excursion tickets to Topeka, Kansas, July 6th to 12th inclusive, at one fare for the round trip, on account of the Teachers' National Educational Association meeting to be held at Topeka, July 13 to 16, 1886. This route being the shortest, is the quickest and most convenient one for you to take. Special accommodations will be provided. Tickets and full information can be had of ticket agents of the C. C. C. & I. Ry., I. & St. L. Ry., and D. & U. R. R.

VESSEL OWNERS AND AGENTS.

MOORE, BARTOW AND GILCHRIST,
Ship Brokers and Agents,
No. 101 St. Clair Street, Room 15.
CLEVELAND, - OHIO.

ALEX McDOUGALL,
VESSEL AGENT AND BROKER,
Duluth.
Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at Duluth, Agate Bay (new iron ore port), Port Arthur, Washburn, Ashland, and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

THOS. WILSON
MANAGING OWNER
Wilson's Transit Line.
Gen. Forwarder. Freight and Vessel Agent.
CLEVELAND, O.

J. J. H. BROWN. EDWARD SMITH
BROWN & CO.,
Ship Brokers and Agents.
Special Attention given to Surveying, Appraising and Settling Marine Losses.
Exchange Building, 202 Main-st., Buffalo, N. Y.

PALMER & BENHAM,
Vessel Owners & Agents,
New Bank Building, corner of Superior and Bank Street, Cleveland, Ohio.

H. J. WEBB & CO.,
Ship Brokers, Vessel Owners and Agents.
[ESTABLISHED IN 1856.]
H. J. WEBB & Co., will charter Vessels for Lake Trade. Special attention given to Chartering Vessels in the Lake Superior Iron Ore Trade, both for the season and single trip.
ARCADE BUILDING, 101 ST. CLAIR ST.,
Room 27. Cleveland, Ohio.
TELEPHONE {Office, No. 338. Residence, No. 1328.

WARNER & BECKER,
Vessel Agents and Brokers,
ROOM 10,
Arcade B'ld., 101 St. Clair St.,
CLEVELAND, OHIO.

JOHN P. DEVNEY,
Marine Collector.
Collections Promptly Attended to.
ASHTABULA HARBOR, OHIO.

JAMES T. ROSE,
Vessel Agent and Broker,
Room 4, Exchange Building, Duluth, Minn.
I have an excellent gang of Trimmers this season, Captain Miller's old Crew.
Special Attention Paid to Chartering Vessels, and seeing that they get dispatch in Port.
CORRESPONDENCE SOLICITED.

PROCTORS IN ADMIRALTY.

ROBERT RAE,
Admiralty and Insurance Law Office,
Room 37 Merchants' building, CHICAGO, ILL.

GEORGE E. HALLADAY.
Attorney and Proctor in Admiralty.
Marine Business Promptly Attended To.
OFFICE 21 BUHL BLOCK, DETROIT, MICHIGAN.

WM. H. DeWITT,
Attorney and Proctor in Admiralty.
ROOM No. 6, BLACKSTONE BLOCK.
CLEVELAND, OHIO.

Make Money!
Fortunes are yearly made by successful operators in Stocks, Grain or Oil.
These investments frequently pay from $500 to $2,000 on each $100 invested. Reliable correspondents wanted. Address for circulars,
WILLIAM E. RICHARDS,
Banker and Broker.
38, 40 & 42 Broadway, New York.

LOANS
1 per cent to 4 per cent per annum;
Investments.
$3 will secure one BRUNSWICK 20-THALER BOND and one ITALIAN RED CROSS BOND, the next redemption of which soon takes place. Every Bond participates in FOUR REDEMPTION DRAWINGS annually—more than one chance to obtain a Premium $20,000 to $100,000. Bonds at all times worth their face value.
Remit $3 by Money Order, Draft, Registered Letter or Express. Balance payable in monthly instalments. U. S. Government Bonds sold on monthly payments.
Address for circulars, &c.,
G. W. FOSTER, Banker,
42 BROADWAY, NEW YORK.

WANTED An active Man or Woman in every county to sell our goods. Salary $75 per month and expenses. Canvassin outfit and particulars FREE. STANARD SILVER-WARE CO., Boston, Mass.

GLOBE SHIPBUILDING CO.,

Build Iron & Steel Boats of Every Description.

Builders of Iron Steamers Onoko, Wm. Chisholm, J. H Devereux, Passenger Steamer Darius Cole, Steamyacht Twilight, Iron Tugs International and Record, and steel steamer Spokane.

OFFICE AND WORKS, OLD RIVER ST., CLEVELAND, O.

ST. MARY'S, OHIO. MONTPELIER, OHIO. } OAR MILLS. NEPTUNE ANCHOR WORKS

DE GRAUW, AYMAR & CO.,

MANUFACTURERS AND IMPORTERS OF

CORDAGE, OAKUM, WIRE ROPE,

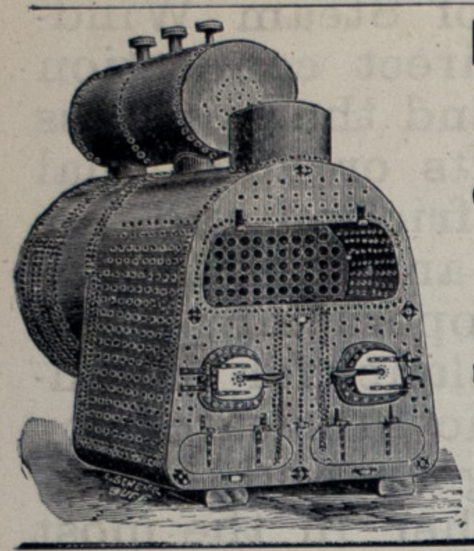
Chains, Anchors, Oars, Blocks,

RUSSIA BOLT-ROPE,

Flags, Buntings, Cotton and Flax Ducks,

MARINE HARDWARE, SHIP CHANDLERS' GOODS GENERALLY.

34 and 35 South-st, New York.



EAGLE BOILER WORKS,

M. RITER, Prop'r,

Cor. Indiana & Mary St.,

BUFFALO, N. Y.

MANUFACTURER OF

High and Low Pressure

Marine, Stationary, Portable, Locomotive and Upright Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.

REPAIRS PROMPTLY ATTENDED TO.

CRESCENT SHIP GREASE

Is especially prepared for MARINE use. It is far superior to tallow for slushing down spars, and can be applied without heating; gives them a fine, glossy appearance; is better than oil for lubricating Windlasses, Steering-gear, etc.

For Sale by Ship-chandlers Generally.

Manufactured by CRESCENT MANUFACTURING CO., 3 and 5 Michigan St., Cleveland, O.

CAMBRIDGE COAL!

Read the following commendation of Cambridge Coal: This is what they all say who try it. Sold only in Detroit by

O. W. SHIPMAN;

Dock Next to Hodge's Iron Works.

PRICES ALWAYS AS LOW AS THE LOWEST!

GIVE THE COAL A TRIAL.

MICHIGAN CENTRAL RAILROAD COMPANY,

DETROIT, MICH., May 12, 1886.

O. W. SHIPMAN, Esq.:

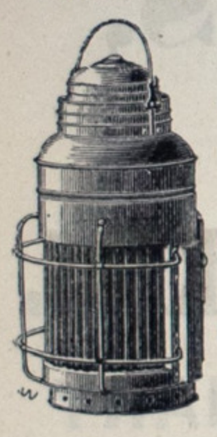
Dear Sir: In regard to the matter of coal, we strongly suggest that the coal furnished by you to the Transfer Boats is much better and cheaper than any other coal we get. We are safe in saying that it is 25 per cent cheaper and better for our use. It burns to an ash, makes no clinker, and we get quicker steam with less coal than in the use of the other coal. Respectfully yours, J. R. INNIS, Sup't. M. C. Ferry.

JOHN WESTAWAY, Chief Engineer M. C. Ferry.

SIGNAL LAMPS

For Steamers and Sailing Vessels.

PATENT FLUTED LENS AND PERFECT COLORS.



GET THE BEST AND AVOID COLLISIONS.

These Lamps give a more brillant light than any Signal Lamp now in use.

They have been adopted by the principal Ocean and Lake Steamers

Over Ten Thousand Now in Use.

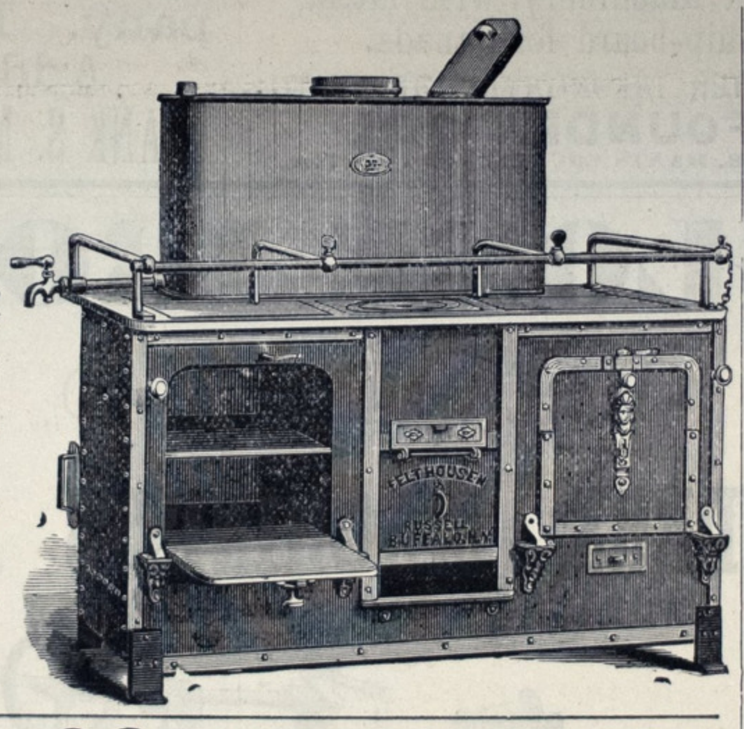
WE ALSO MANUFACTURE THE CELEBRATED

French Wrought Iron Ranges and Broilers of all Sizes for Steamers and Hotels.

Steamboat Copper, Tin, and Sheet Iron Workers.

FELTHOUSEN & RUSSELL,

139 & 141 MAIN ST., BUFFALO, N. Y.



D. S. AUSTIN. EMMET AUSTIN.

D.S. AUSTIN & CO.

Ship Chandlers & Sail Makers.

WHOLESALE AND RETAIL DEALERS IN

Cotton Duck, Cordage, Wire Rigging, Oakum, Pitch, Tar, Paints, Oils, Etc.

Vessels' and Steamers' Complete Outfits Furnished on Short Notice.

FOOT OF WASHINGTON STREET, BUFFALO, N. Y.

HOWARD H. BAKER & CO.,

Ship Chandlers and Sail Makers,

HAVE REMOVED TO THEIR NEW AND COMMODIOUS STORE,

18 to 26 Terrace,

Corner of Commercial and Pearl Streets

BUFFALO, N. Y.

SAMUEL F. HODGE & CO.,

MANUFACTURERS OF

MARINE,

Stationary & Portable Engines,

MINING MACHINERY AND

PROPELLER WHEELS,

Riverside Iron Works, 314 to 326 Atwater Street,

DERO IT, MICH.

RUELLE & CO'S TUG LINE.

TUGS:

J. L. MINER, C. D. McKINNON, QUICKSTEP.

RIVER AND HARBOR TOWING,

STEAM PUMPS AND LIGHTERS.

WRECKING A SPECIALTY.

UP RIVER OFFICE, Belle Isle Ice Co.'s Dock. Telephone No. 199—3 rings

DOWN TOWN OFFICE, J. W. Westcott's foot of Woodward Ave. Telephone No. 55.

DETROIT.

ROBERT E. HILLS,

57 & 59 North Wells St., Chicago, Ill. Telephone 3321.

STEAM FITTING AND HEATING,

Wrought Iron Pipe & Fittings.

ENGINEER'S SUPPLIES.

General Jobbing Work Done Promptly.

Also, Proprietor of North Side Brass Works.

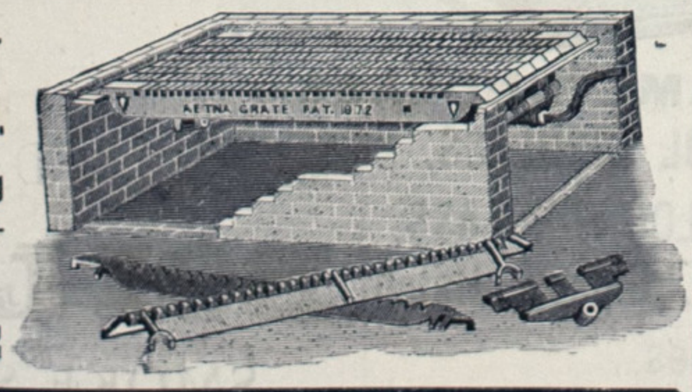
THE ÆTNA GRATE.

G. C. BARNES, Agt.

This Improved Shaking Grate Especially Adapted to Burning Slack.

Globe Iron Works, Manufac's.,

Office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.



WARD & JACKSON,

SHIPSMITHS.

All Kind of Forgings, Bolts and Truss Rods for Building.

49 Main-st Cleveland

GEORGE SAAL'S SON.

Copper-smithing of all Kinds.

VESSEL WORK A SPECIALTY.

403 and 405 Detroit-st., corner Duane-st., Telephone 1638. CLEVELAND, O.

J. C. GOSS,

[SUCCESSOR TO ED MAYES.]

Sail Maker and Rigger,

16 Woodward ave., Detroit, Mich.

OVER H. D. EDWARDS & CO.

First class accommodation for storing vessel outfits Fire proof building. Contractor for covering boilers.

CAPT. GEO. A. SIMPSON,

Compass Adjuster,

COMPASSES, BAROMETERS, PATENT LOGS AND MARINE GLASSES REPAIRED,

Schooners can have their Compasses Adjusted for Local Attraction at the time of repairs by stating how much they are out on East or West Courses, and which way it leads, North or South of above Courses.

161 River St., Cleveland, O.

FOR SALE,

AT

THE GLOBE IRON WORKS.

SECOND HAND MARINE BOILER four feet wide, 6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes 60 inches long, cast iron breeching, good as new.

A1 TUG FOR SALE.

This tug is 52 feet over all, 13 feet 3 inches beam, and 6 feet 6 inches depth of hold. Engine, 13x14; steel boiler 4 feet 6 inches diameter by 9 feet long. The hull was built by Geo. H. Notter, Buffalo, and is an excellent model and well built. The tug is nearly new, having done only five month's work since she came out new last summer. She has a poop deck and finished cabin fore and aft, and classes A1. Price, $4,300. Address MARINE RECORD OFFICE.

A GIFT

Send 10 cents postage, and we will mail you *free* a royal, valuable sample box of goods that will put you in the way of making *more money* at once than anything else in America. Both sexes of all ages can live at home and work in spare time, or all the time. Capital not required. We will start you. Immense pay sure for those who start at once. STINSON & Co., Portland, Maine.

Established in 1859.

HENRY LEOPOLD.

Manufacturer and Dealer in all kinds of fine and plain

FURNITURE & UPHOLSTERY,

And Manufacturer of Counters, Shelving, Bank and Bar-room Fixtures.

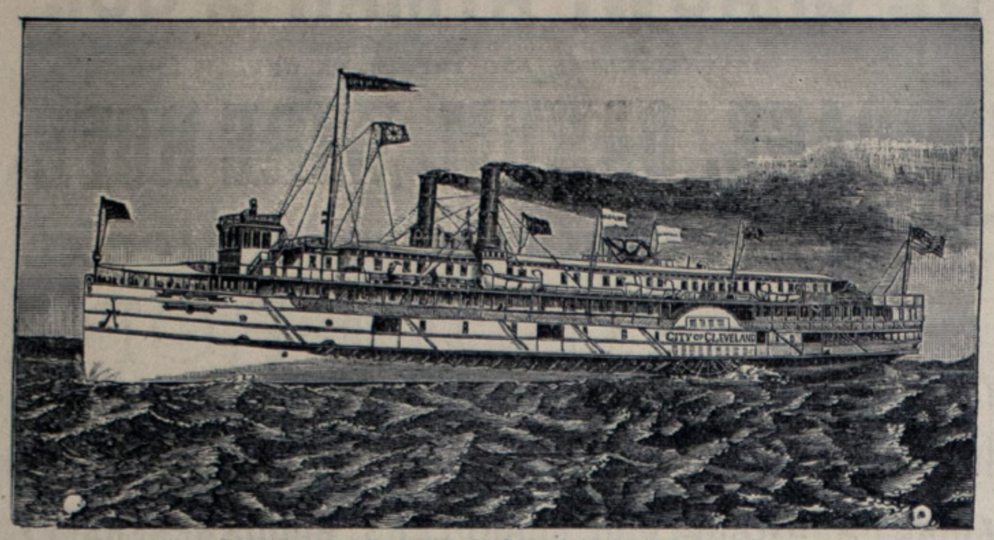
Mattrasses and Vessel Furniture

A SPECIALTY.

Warerooms 798 and 800 Lorain-st., near Fulton. Factory 10 Willet-st.

CLEVELAND, OHIO.

DETROIT DRY DOCK CO.,



CONSTRUCTORS OF EVERY DESCRIPTION OF

Steel, Iron, Composite, and Wooden Ships.

IRON SHIP BUILDING WORKS AT WYANDOTTE, MICH.

Dry Docks and Repair Yard, ft. of Orleans-st., Detroit, Mich,

---

SEND FOR MARINE LAW BOOK

Which Gives all Points On Marine Law,

PRICE, ONE DOLLAR.

"THE PROVIDENCE"

WINDLASSES, CAPSTANS, ETC.,

IN CANADA.

THE WINDSOR FOUNDRY Co

Have made arrangements with the American Ship Windlass Co. to build their Celebrated Machinery, with latest improvements for use on Ship-board for Canada.

FOR PRICES, PLANS AND ALL OTHER IAFORMATION APPLY TO

THE WINDSOR FOUNDRY CO.,

WINDSOR, HANTS COUNTY, NOVA SCOTIA.

Established in 1857.

AMERICAN SHIP WINDLASS CO.,

Builders of Steam, Messenger Chain and Hand Windlasses, Power, Crank and Steam Capstans, Wharf and Ferry Drops. Their Capstan Windlasses have a Power Capstan with a single head which has power and speed arrangement entirely independent of the windlass, and which makes a direct connection with the windlass without the intervention of any gearing to complicate it and increase the friction.

In all their styles of Steam Windlasses they make a direct connection between the engines and the windlass without counter shafts or additional gearing. This saves friction and liability to break down and conduces to durability and ease in operating. They also have a counterbalance for the engines and an automatic lubricator for the worm and worm gear, and the engines are placed together in the most accessible position. The above improvements and others too numerous to mention, but which are familiar to Masters, Owners and Builders, are covered by Patents owned exclusively by this Company. For plans and information

Address,

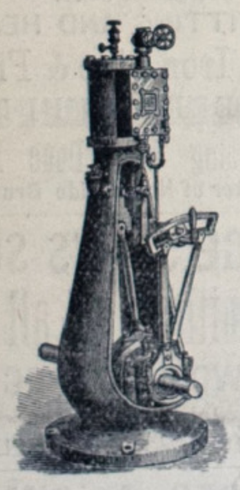
FRANK S. MANTON, Agent. P. O. Box 53, Providence, R. I.

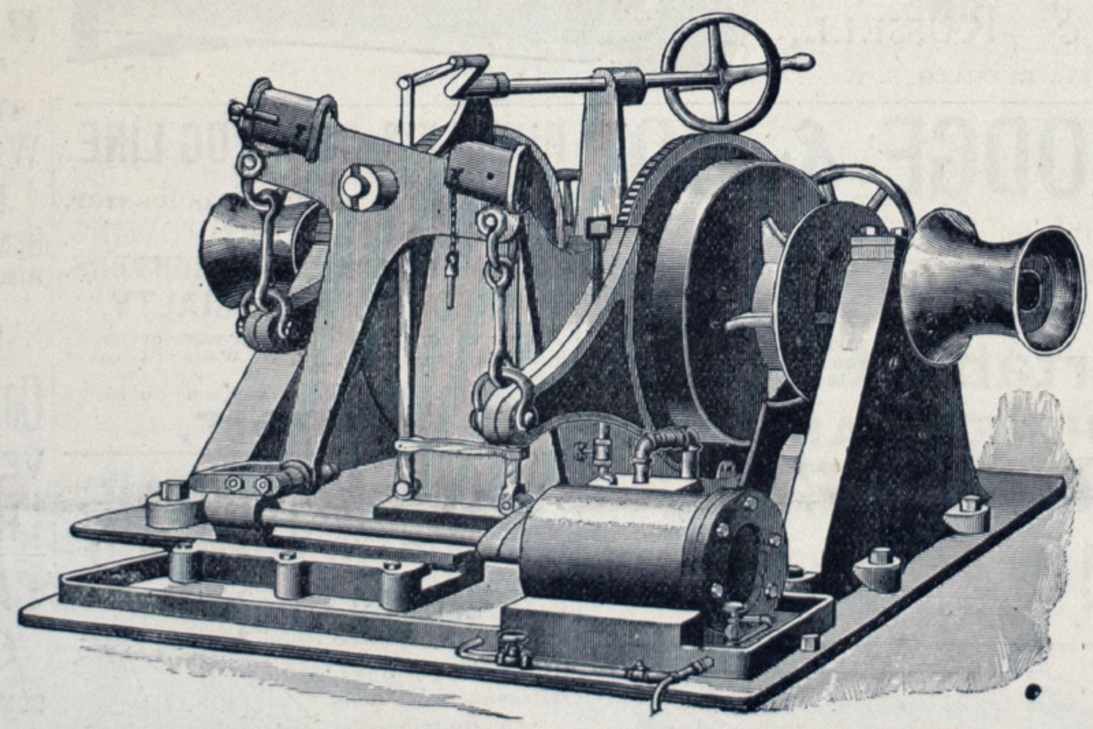
THE GLOBE IRON WORKS,

CLEVELAND, OHIO.

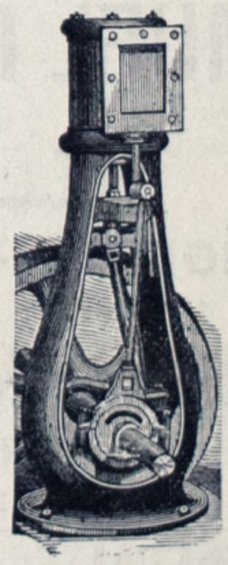
GENERAL FOUNDERS, MACHINISTS AND BOILER - MAKERS.

MARINE.





STATIONARY



PATENT STEAM WINDLASS.

High Pressure,
Low Pressure,
Condensing,
Compound

MARINE AND STATIONARY ENGINES.

HAND AND SPOOL WINDLASS,
AMAZEEN BEAM LOG WINDLASS,
Centerboard, Mast, Gipsey, Hatch Winches,
Water Seal Stove Pipes, Chocks, Coal Scuttles, Hawse Pipes Cleats.

MARINE AND STATIONARY

BOILERS,

SMOKE STACKS,

General Plate and Sheet Iron Wor

ENGINES FROM FOUR TO FORTY H. P. KEPT ON HAND.